

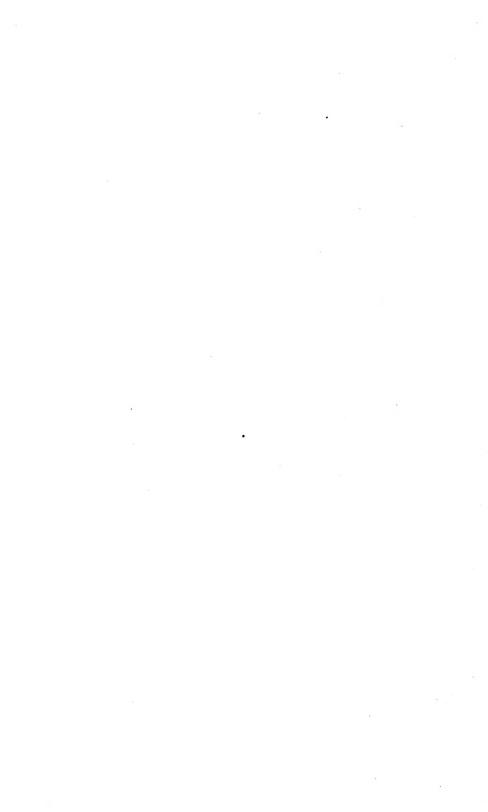


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SKIN DISEASES

OF

CHILDREN

BY

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WITH TWELVE PHOTOGRAVURE AND CHROMOGRAPHIC PLATES,
AND SIXTY ILLUSTRATIONS IN THE TEXT

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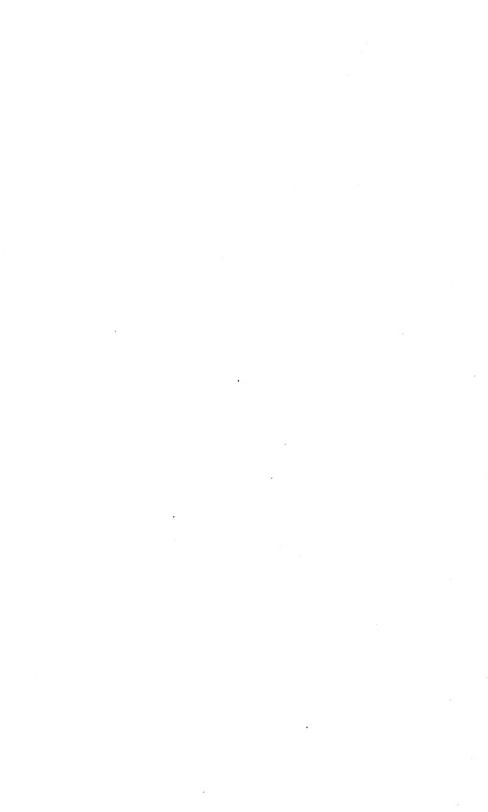
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PREFACE.

A SERIES of illustrated articles on certain skin diseases which are apt to occur in infancy and childhood appeared in the American Journal of Obstetrics and Diseases of Women and Children a year ago, and are now published in book form. While some additions have been made to most of them, the work is far from being a complete description of all the cutaneous affections which occur in childhood. It is merely intended to serve as a concise and practical sketch of the symptomatology and treatment of those eruptions which are most likely to affect the juvenile patients of every family physician.

To Dr. Horace S. Stokes the thanks of the author are due for valuable assistance, especially in the compilation of the appended formulary.

18 East 31st street, New York, June, 1897.



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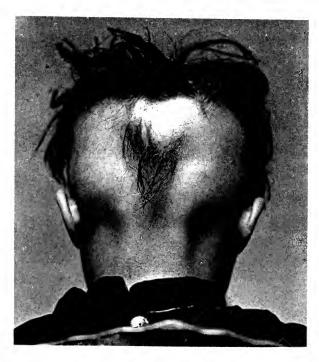
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PLATE I.





ALOPECIA AREATA.

From the collection of photographs of Dr. GEORGE HENRY FOX.

ALOPECIA AREATA.

ALOPECIA areata is an affection of frequent occurrence in childhood, and one which the family physician should be competent to recognize and to treat. To say that he should be able to treat a case as successfully as any specialist is not making a great claim, when we consider how little positive knowledge is possessed by the latter concerning the cause and cure of this not uncommon disease.

As the name indicates, alopecia areata implies the occurrence of baldness in spots; but all bald areas are not necessarily cases of alopecia areata. Before describing the affection itself it may be well to refer briefly to certain forms of baldness, areate or complete, which are often improperly classed as cases of the disease in question.

When infants are born without hair, and for years, perhaps, exhibit but a sparse capillary growth, coincident usually with imperfect dental development, this condition is not to be regarded as alopecia areata and the term is not apt to be applied.

When, as a result of injury, fright, or intense mental excitement, the hair falls suddenly from the scalp, or from the whole body in the case of adults, we have a condition which is by no means one of true alopecia areata, although in such cases the name is very apt to be misapplied.

When, from injury to a nerve, an irregular patch of baldness develops upon the portion of hairy skin which the nerve supplies, the condition is one which strongly resembles the disease in question. It differs, however, from true alopecia areata in several essential points. It usually lacks the rounded outlines, it does not tend to spread or duplicate itself at other points, and the hairs at the margin of the bald area are not loosened. It is a bald patch of evident neurotic origin, but should be distinguished from alopecia areata.

A rare form of scalp disease, known as folliculitis decalvans,

occurs in children as well as in adults, and is very apt to be mistaken for the commoner disease, to which it may bear a strong resemblance. Its distinguishing features are the signs of inflammation in incipient patches, the groups of dark plugged follicles, and the atrophied or cicatrized appearance of the bald patches, which are usually numerous and small. In very rare cases of ringworm of the scalp a smooth, bald patch results (Fig. 1). Whether this is to be regarded as a peculiar form of ringworm (so-called bald ringworm), or as a case of alopecia



Frg. 1.-Bald ringworm.

areata developing on the site of trichophytosis, is a vexed question.

In true alopecia areata we have as essential clinical features the development of the disease in one or more small, rounded patches; the extension of these patches by a loosening and falling of the hair at a portion or the whole of the periphery; and a marked tendency to spontaneous recovery. The first bald spot in this affection may occur upon any portion of the scalp, and is usually the size of a ten-cent piece or larger when first

discovered. It is unaccompanied by itching or any sign of inflammation, and may have existed for many weeks before cutting of the hair or a casual examination of the scalp brings it to light. In exceptional cases tenderness upon pressure, anæsthesia, hyperæmia, ædema, marked pallor or depression of the patch, are symptoms which have been noted, but ordinarily a partial or complete loss of hair is all that can be seen. The original patch sometimes remains single, but usually other patches develop near the original one, and frequently, by increase



Fig. 2. - Serpiginous form of alopecia areata.

in size and coalescence, denude a considerable portion of the scalp, as is shown in the accompanying plate and in Fig. 2. The irregular area from which the hair has fallen is smooth and soft, and, unlike a patch from which the hair has been epilated or shaven, the mouths of the hair follicles are scarcely perceptible. In some cases the bald patches are numerous, of varying size, and show little tendency to run together. The affection is by no means limited to the scalp, and in severe cases the eyebrows and lashes also suffer. In adults the bearded portion

of the face and other hairy parts may present bald areas or appear completely denuded.

When first discovered the patch is usually tending to increase slowly in circumference, and the hairs at the margin of the disc are so loosened in their follicles that several can be pulled out at a time without giving the patient the slightest pain. Often the loose hairs will only be found on one side of the patch, and extension in this direction is certain to follow. Examined beneath the microscope these loose hairs will be found to be atro-



Fig. 3.—Growth of white hair on patches.

phied toward the root, and in some cases they will break near the surface of the skin. This breaking of the hairs does not leave a short, stiff stubble like that which is characteristic of the patches of ringworm, but as the broken-off roots of the affected hairs in alopecia areata project from the scalp near the margin of the patch, they may be noted as short, fine hair tapering downward and sometimes suggesting a crop of exclamation points.

The extent to which alopecia areata will develop in a given case it is difficult to determine in advance, but sooner or later in

most cases, and especially in those cases occurring in childhood, the cause seems to have ceased to act and the hair returns. A fine, downy growth may be seen over a portion or the whole extent of the bald patch, and gradually the baldness disappears. In some cases, and especially in children with dark hair, the new growth is at first colorless and presents quite a contrast with the normal hair (Fig. 3). If this new hair persists in growing, it is certain to become pigmented in due time and assume a natural color. But unfortunately in some cases this new growth does not persist. It grows just enough to



Fig. 4.—Complete loss of hair.

delude one into a hope of speedy recovery, and then begins to loosen and fall out. Even a temporary growth, however, is encouraging and warrants the prediction that sooner or later the disease will come to an end. In many cases two or three months will find the hair growing naturally over the whole scalp, while in other cases the affection, through a stubborn persistence or a succession of relapses, may last a year or two. In adults a complete loss of hair is often irremediable, but in

children the prognosis is comparatively favorable even when the head is as hairless as a billiard ball (Fig. 4).

The etiology of alopecia areata is a vexed question. the great amount of study and careful observation which has been devoted to this interesting affection, there is much difference of opinion as to its pathology, and its true nature still remains obscure. For a long time it was believed to be a neurotic affection, the bald patch resulting from a faulty innervation of the affected area. With the development of the germ theory of disease there has arisen a strong belief on the part of many dermatologists that the affection is parasitic in character. Clinical facts are not wanting in support of either view, but, while the facts are indisputable, it cannot be admitted that they prove beyond all shadow of a doubt the truth of either the neurotic or parasitic hypothesis. Recently it has been suggested, in view of the conflicting facts and theories, that there are two varieties of the affection, one of which, occurring in epidemic form, must certainly be parasitic. Without attempting to introduce evidence and argue the question, it is sufficient to state that the nature of this disease is still subjudice and will doubtless so remain until more careful observations have been made or stronger arguments presented upon one side or the other. The disease occurs in both sexes, but is said to be somewhat more frequent among boys than among girls. It has been claimed that cats and other domestic animals suffer from the affection, and cases have been reported of its transmission from these to their human playmates; but in this connection the question naturally arises as to the correctness of the diagnosis between alopecia areata and ringworm, which not infrequently originates in this manner.

In the treatment of alopecia areata no brilliant results have been obtained. Many cases recover spontaneously in a short time, while in other cases the most assiduous and persistent treatment fails to effect any notable result. Many remedies are recommended and certain methods of treatment are warranted to cure in so many weeks, but, however valuable these methods may be in the hands of their originators, they often fail utterly when employed by other hands. I have photographed many cases and have observed that a few of these have gotten well speedily without further treatment. But photography will not cure all cases; neither will some of the vaunted methods of treatment, as I have had occasion to learn from experience. In fact it must be frankly confessed that the

treatment of alopecia areata is in many cases by no means as satisfactory as one might wish. Patients sometimes go from one physician to another, and fortunate is he who happens to take charge of the case at the time when the unknown cause has ceased to act and the hair is disposed to return. Unfortunate is he, however, if he jumps at the baseless conclusion that his plan of treatment in this case is wonderfully efficacious and will cure other cases with equal rapidity.

But treatment in alopecia areata, although it may not be productive of brilliant results, is capable of doing some good in the way of hastening a cure; and since the patient usually demands some kind of treatment, the physician is certainly justified in doing the best he can under the circumstances. The practical question at once arises, "What is the best thing that he can do?"

The first step to be taken is to prevent any possible spread of the disease to those who come in contact with the patient. If only in deference to the view held by excellent authorities that the affection is of a contagious nature, it is well to insist that every patient should have his or her own brush and comb and use no others. As to whether children with alopecia areata should be allowed to attend school, a difference of opinion might arise according to the opposite views held as to its contagious nature. But since the disease is only slightly, if at all, contagious, it would hardly seem justifiable to keep a child at home who is undergoing proper local treatment.

Whatever will stimulate the scalp and draw the blood to the pale, hairless patches will tend, in my opinion, to promote the growth of hair. And this can be done without the infliction upon the patient of either pain or discomfort. Nearly all of the powerfully stimulating applications are parasiticide in their action, and are therefore indicated, whether one believes in the neurotic or the parasitic origin of the disease. The beneficial effect results from the artificial congestion of the patch, whether the action of this be to arouse the dormant nerve filaments or to check the development of a micro-organism.

The galvanic current is perhaps the best stimulant that can be used; but as the patient cannot conveniently have electricity applied two or three times a day, it is more advisable to prescribe some stimulating lotion or ointment. The liquor ammoniæ fortior U. S. P. I have used for many years and in many cases; and, while it may be no better than other stimulating applications which tend to redden the skin, it has certainly

appeared to do as much good as any one of the many other remedies which I have tried. If something more parasiticidal in its action is desired, an ointment of chrysarobin from three to ten per cent in strength can be recommended as an effective application. In prescribing this the physician must not forget to mention the fact that it will stain the bed linen, and caution the patient not to get any ointment in his eyes lest a severe conjunctivitis result.

The plan long recommended and often practised of shaving the scalp and blistering the patches with cantharis, croton oil, or pure carbolic acid, may be of some value, but not enough to compensate for the suffering which it involves. Although patients will sometimes stand any amount of painful treatment in order to get cured, there is no justice in submitting them to harsh measures when milder ones are of equal value.

Epilation of the loose hair at the margin of the bald patch is advisable, since it seems in some cases to prevent the spread of the disease; but general epilation is unnecessary, and, so far as I know, is never practised in America.

A patient seen recently by the writer has had alopecia areata for ten years. Two months after marriage his wife found three bald spots upon her own head. At a European health resort the physician who was consulted, evidently believing in the parasitic origin of the disease, ordered the hair to be epilated not only on the scalp but on other hairy parts of the body. The spots persisted, and complete epilation was repeated in the case of both husband and wife. The lady's maid complained of slight falling of the hair, and her scalp was ordered to be thoroughly epilated, in spite of her indignant protest. In these cases, which illustrate the absurd extreme to which theoretical therapeutics may be carried, the vigorous treatment would have been pardonable had it been successful, but the gentleman, an extremely nervous individual, has still bald patches upon his scalp and chin.

Of internal medication it need only be said that neither arsenic, jaborandi, nor any other drug in the pharmacopæia is capable of producing any manifest result in most cases. They may be of some value, as has been claimed, but reliance upon them is usually disappointing. The restoration of hair after administration of a drug is no proof of its value in a single case. The absence of improvement after its use in repeated cases is at least suggestive of its inertness. Any internal medication which will improve the physical condition of the patient is of

course advisable and may tend to hasten the cure of alopecia areata. But in this affection impairment of health rarely seems to be a predisposing cause, and in many cases the patient is apparently in perfect health.

The uncertain result of treatment in alopecia areata should always lead to a guarded prognosis. In most cases a cure can be promised, but it is never advisable to specify any given time at which it may be expected. The younger the patient, the less the extent of baldness, and the more recent its development, the better will be the prospect of a speedy return of hair.

PLATE H

TO HE YTES'S CAPITIS.

OF Congetion of photographs of PROCEEN Y FOX



TRICHOPHYTOSIS CAPITIS.

From the collection of photographs of Dr. GEORGE HENRY FOX.

RINGWORM AND FAVUS.

There are few if any cutaneous affections so ineffectually and unsuccessfully treated by the physician in general practice as are ringworm and favus. The family physician who assumes to understand and undertakes to treat (as every family physician should do) the common affections of the skin is often guilty of serious malpractice in the management of these parasitic affections. The diagnosis is generally made without difficulty, although mistakes will sometimes occur in the best-regulated practice. But, granting that the diagnosis is speedily and correctly made, the treatment commonly employed is so poorly adapted to the requirements of the case and so imperfeetly carried on, that many incipient cases, which ought to be cured by a few weeks of vigorous treatment, are allowed to persist for months or years, it may be, and to become so chronic and intractable that even the most skilful treatment must then require a long period of time and much patience to effect a Nor is this the only baneful effect of this feebleness of Other children in the family, the school, therapeutic efforts. or the vicinage are permitted to contract the disease, while the physician treating the original case remains blissfully ignorant of the ever-increasing debt of suffering which is his just due. Therapeutic incompetence may appear less criminal than wilful neglect, but the results are equally unfortunate, and in the treatment of these common parasitic affections the physician ought not to be guilty of either charge.

There are three common affections of the skin due to the presence of a vegetable parasite—viz., favus, trichophytosis (ringworm), and chromophytosis (tinea versicolor). As the latter is rarely if ever met with in childhood, it may be left out of consideration at present; and since the remaining two, though distinct in origin and clinical features, are allied in nature and call for similar methods of treatment, it will be convenient to consider them together.

Upon non-hairy parts, such as the face, neck, hands, and trunk, ringworm begins as a minute, slightly reddened, scaly disc, which gradually enlarges. When it has reached the size of a ten-cent piece the advancing border appears elevated while the centre tends to become smoother, and the lesion presents an oval, circinate, or "ring"-like appearance (Fig. 5). In rare cases a circle of fine vesicles can be detected at the periphery. One or more rings may be present, and the coalescence of two



Fig. 5.—Trichophytosis corporis.

or more may produce an irregular patch like a figure of eight or a trefoil. Occasionally when the ring has attained considerable size red papules or new foci of disease may appear in the smooth and perhaps slightly pigmented centre, and by gradual development may produce two or even more concentric rings.

Favus developing upon non-hairy parts produces scaly discs which at first are not readily distinguishable from the lesions of ringworm; but soon upon the branny surface a minute yellow, cup-shaped crust of the size of a pin's head will develop, which at once settles the question of diagnosis. These bright-yellow, pin-head cups multiply and by coalescence form a sulphur-colored crust which is quite characteristic (Fig. 6).

Ringworm and favus of non-hairy parts cannot be considered as serious affections, but when the parasitic fungus of either finds its way into the hair follicles upon the scalp, as often happens with children, the case is quite different. The unfor-



Fig. 6.-Favus corporis.

tunate child is now the victim of an extremely obstinate disease, and, unless judicious measures are adopted without delay, is doomed to months or perhaps years of annoyance, if not of actual suffering. Upon the scalp these affections are always obstinate, and when this fact is not appreciated by the physician in charge of the case, and inefficient measures are adopted, the case usually goes from bad to worse until a cure seems nearly hopeless.

The first indication of ringworm of the scalp is commonly a

small scaly disc, which appears almost bald from the breaking of the hairs close to the surface (Fig. 7). This dry, roughened patch, with its characteristic growth of short, broken hairs, tends to enlarge if allowed to go untreated (see plate), and other discs are apt to develop in the vicinity or upon other portions of the scalp. Frequently a large number of scaly points or small discs may be found involving the greater portion of the scalp and constituting what is known as disseminated ring-



Fig. 7.—Trichophytosis capitis.

worm (Fig. 8). Neglect in such a case is usually followed by a coalescence of the patches and disease of nearly the whole scalp. Not infrequently an eczema complicates the ringworm and obscures the diagnosis.

In rare cases the ringworm fungus, instead of producing scaly discs, sets up a deep-seated inflammation of the hair follicles, and a bald, fluctuating tumor or a cluster of boggy, rounded elevations forms upon the surface of the scalp. This condition is generally painful, and is known as kerion or the kerionic form of ringworm. The suppuration often loosens the hair, and in these cases complete baldness is more frequently found than the stubble-like growth of hair which characterizes the ordinary form of the disease. According to recent observations, this form of ringworm is due to a special fungus which also affects the lower animals.

In favus of the scalp there are no broken hairs found as upon the discs of ringworm, and the diagnosis is usually based upon



Fig. 8.—Trichophytosis disseminata.

the presence of the minute yellow, cup-shaped crusts which develop at the orifices of the hair follicles. When these are allowed to multiply, a thick, pale-yellow, friable crust forms, as is seen in the well-marked case (Fig. 9) which was originally published in the author's "Photographic Illustrations of Skin Diseases." Much has been said about the peculiar odor of favus as a basis of diagnosis. While it is true that in a neglected case, where the crusts have accumulated, a keen scent combined with a vivid imagination may perceive a fragrance which is

quite suggestive of "mice," "putrid urine," or "an ill-kept menagerie," the diagnosis can be far more readily made from the characteristic appearances. In doubtful cases, moreover, in which there are no characteristic crusts, the peculiar favic odor is not likely to be perceived by ordinary olfactories. While typical cases of ringworm and favus are totally unlike in their clinical appearance, treatment often obscures the characteristic features, and hence, in cases where the crusts have



Fig. 9.-Favus capitis.

been removed, the differential diagnosis may sometimes be attended with difficulty. In ringworm, however extensive and chronic the case may be, the hair is not apt to be permanently destroyed; while in favus the pressure of the crusts which develop in the epidermic layer around the orifices of the follicles tends to produce atrophy of the hair bulbs, and in all cases of long standing a few bald, depressed, and cicatricial areas are generally observed, and upon these the hair will never grow. In chronic cases, even after the disease has been cured, a num-

ber of wiry, twisted, or deformed hairs are usually seen growing around or among these cicatricial patches.

Trichophytosis capitis is a disease of youth, and even when allowed to go untreated it will tend to a spontaneous cure as the patient matures. Though ringworm of the beard is very common in men, for some inexplicable reason ringworm of the scalp is never met with in adult life in either male or female. Favus, on the other hand, occurs at all ages. Developing in youth, it may persist indefinitely, although it is far more frequent in childhood than in adult life.

The cause of ringworm and favus is the presence in the epidermis and hair follicles of a micro-organism, the growth of which gives rise to more or less inflammation and the characteristic clinical appearances already described. The parasitic fungus causing ringworm is the trichophyton. Several varieties have recently been described, but it is not as yet satisfactorily proven that these varieties of the fungus are the cause of all clinical variations noted in the course of the disease. etiological factor in favus is the achorion. This fungus does not penetrate the shaft of the hair as readily as does the trichophyton, and hence the absence in favus of the broken hairs which are so characteristic of ringworm. Children in perfect health are liable to contract either disease from some child already affected, or possibly from some pet animal. ticular condition of the skin is necessary to furnish a congenial soil for the development of the parasite, although it is true that in weak, poorly nourished children whose heads are often moist the disease is more likely to thrive and the inflammatory symptoms to be more marked. Age, however, seems to modify the character of the soil in a notable degree, and it is well to remember the clinical fact, already mentioned, that ringworm of the scalp, so common in childhood, is never seen in adult life. In like manner ringworm of the beard, so frequently seen in middle life, is quite exceptional among old men.

In the treatment of ringworm and favus a host of local applications are recommended by dermatological writers, which only proves that the majority of them are of very little value. Moreover, an admirable prescription may be written, but if the nurse or person in charge of the patient is not given full and explicit directions as to how the treatment should be carried out, the result is certain to be unsatisfactory. The local remedy employed is often of far less importance than the exact method of its use, and attention to minute details which may seem

unimportant to the inexperienced is always the key to success. In no other affections of the skin are intelligence and persistence so essential, and for the exercise of these in the daily care of the patient the physician should hold himself responsible.

On non-hairy parts ringworm and favus can be readily cured by almost any parasiticide. A ten per cent ointment of salicylic acid is an effective application, or, if the skin is very delicate, it may be better to simply moisten the patches frequently with a saturated solution of sodium hyposulphite in rosewater. when the scalp is affected the cure is always a difficult one, and the first step is to impress upon whoever is in charge of the case the important fact that half-way measures will do little or no good. It is always advisable to shampoo the scalp thoroughly once a day, especially if the hair is short, as this gives the parasiticide application a much better chance to penetrate the hair The neglect of frequent and thorough washing of the scalp is the chief cause of the frequent therapeutic failures. When this is carefully attended to, the thorough inunction twice daily of sulphur ointment, oleate of mercury, or chrysarobin ointment (ten per cent) is certain to do good. If a cap is worn by the patient, as is advisable, it should be fastened to the head by a ribbon or strip of bandage, and not by a rubber band, on account of the serious results which might ensue from a prolonged stoppage of the circulation.

There is one remedy which is indispensable in chronic cases and of the greatest value in any case. It is epilation. It must be admitted that this is always troublesome to the physician or nurse who undertakes to carry it out, and more or less painful But it saves time and trouble in the end. With to the patient. a well-made pair of epilating forceps, which should be light and broad at the end of the blades, the short hairs can be firmly caught and quickly pulled out. It is advisable to epilate first the long hairs around the margin of a patch until a narrow white ring of healthy scalp appears. This will prevent any increase in size of the patch, and the short hairs upon the reddened, scaly surface of the patches can be pulled at leisure. As many of these will break in the process of epilation, the operation must be repeated until the patch is quite bald and begins to assume a comparatively healthy appearance. epilation and the application of parasiticides can be carried on at the same time. When the inflammation has subsided and the scaling disappeared, and all the patches have assumed a comparatively healthy appearance, the hair may be allowed to grow and all treatment suspended save the daily use of a five per cent salicylated oil. If, however, at any time a slight scaliness or dry, brittle appearance of the hair is noted at any point, it is advisable to epilate again and convert the suspicious spot into a small bald disc. This plan of treatment is best calculated to effect a certain if not a speedy cure, but often it will require months of patient and persistent treatment, and perhaps a year or more in exceptionally extensive and chronic cases.

The parents or guardians of the patient should always be apprised at the outset of the obstinacy of the disease and its unfavorable prognosis as regards a speedy and pleasant cure, in order to avert the discouragement and dissatisfaction with the method of treatment which otherwise would naturally ensue.

It seems hardly necessary to add that no child with ringworm should be allowed to attend school. If our city Board of Health could make provision for a periodical inspection of the public-school children, with a view to checking the spread of ringworm and other contagious diseases, a considerable amount of suffering and expense could be saved to a certain number of scholars and their parents. Furthermore, if some careless physician were sued for malpractice for allowing an uncured case of ringworm or favus to attend school, simply because upon a hasty inspection, without the use of a microscope, he thought the child was all right, it might be unfortunate for the physician, but by no means a bad thing for the profession.

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Impelige Conlagiosa

From the collection of photographs of

Or George Henry Fox

CONTAGIOUS IMPETIGO.

THE affection known as contagious impetigo, though a very common one, is by no means as clearly defined as other dermatoses of frequent occurrence. Crusted lesions or scabs resulting from the use of the finger nails and the drying of a copious blood-stained secretion are frequently seen upon the faces of children, but the origin and nature of this eruption are not always plain. That the lesions are contagious and auto-inoculable is a matter of simple observation, and that pus cocci play an important part in their development is generally admitted. Mothers and nurses are often affected by children under their care.

It is undoubtedly the presence of micro-organisms which occasions the crusted or impetiginous form of eczema (the crusta lactea, or milk crust of infants). In these cases we have an ordinary eczematous inflammation of the skin due to some internal condition, but the peculiar clinical aspect of the eruption -viz., the suppuration and crusting-is without doubt due to the external agency of pyogenic microbes. In other cases minute aggregated pustules develop superficially and exude an abundant honey-like secretion which dries into yellow, gummy crusts of varying size and irregular outline. This eruption is comparatively rare, affects adults as well as children, and is by some regarded as a pustular eczema and by others as impetigo or contagious impetigo. In fact it is difficult to determine in practice precisely what cases should be included under the lastnamed affection, but a large number of cases occurring in children present certain definite lesions which are readily recognized and indicate an identity of origin.

In a typical case of contagious impetigo (and it is questionable whether there is any impetigo which is not contagious) the lesion is usually a flattened vesico-pustule. This is small at the outset, superficial, and without any surrounding area of inflammation. It is always single, although when the pustules

are very numerous, a number of them in close proximity may appear like an irregular group. When this lesion escapes being scratched, and thereby altered in appearance, it tends to increase peripherally and to become depressed in the centre. It usually reaches its maximum development in a few days, and is about the size of a five-cent nickel. At the advancing border the epidermis is raised by a milky, purulent secretion while the depressed centre appears of a darker hue. Upon the back of the fingers or hand, where, next to the face and scalp,



Fig. 10. - Contagious impetigo.

the lesions are most common, they look like recent and accidental burns. Upon the palm, where the thicker epidermis is less likely to be ruptured, the lesions are apt to present the appearance of hemispherical or flattened pustules, quite similar to, though somewhat larger than, the pustules occasionally observed in scabies. After an existence of about a week the contents of the pustules tend to dry into yellowish, honey-like or "straw-colored" crusts. If the lesions remain uninjured by the finger nails, the affected skin gradually heals and the crusts

appear as though "stuck on" to the cutaneous surface. When thoroughly dried these crusts fall, and even when picked or rubbed off they leave no ulcerated surface, but merely a small hyperæmic area.

It is only in exceptional cases, however, that this natural and characteristic evolution of the lesion can be observed, for in children, especially, the irritation of the lesions usually provokes scratching, which changes their clinical appearance, and a little blood mingled with the purulent secretion gives rise to



Fig. 11 —Confluent lesions of impetigo.

the formation of a dark crust or scab. Upon the extremities, especially the legs, friction of the clothing, dirt, and constant scratching frequently inflame the lesion, and a dark crust upon a superficial ulceration with a narrow red areola is produced, which has generally been described as a distinct skin affection under the name of ecthyma. These ecthymatous pustules, common in cachectic children, are often associated with the characteristic lesions of contagious impetigo upon the face and hands and are evidently of similar if not identical origin.

In certain cases of vaccination a double infection may sometimes take place. When the vaccine virus has produced a vesicle, the microbes of contagious impetigo may be accidentally implanted. The vaccine lesion now becomes unusually inflamed and itchy. Through scratching a number of other crusted lesions are developed upon the arm and elsewhere, and doubtless some of the cases of generalized vaccinia which have been reported may be justly considered to have been cases of contagious impetigo beginning at the point of vaccination.



Fig. 12.—Umbilicated lesion on forehead,

Upon the scalp the lesions of contagious impetigo are frequently found, and usually appear as small, isolated, circular crusts. These frequently occasion temporary areas of partial baldness, and when the disease is of long standing and there is very much suppuration a permanent loss of some hair may result. The affection is often associated with pediculosis capitis, and in such a case the frequent scratching of the head is very apt to multiply the lesions, and often the diagnosis is obscured by the development of eczema upon the scalp and back of the

neck. In impetigo of the head and face the cervical and submaxillary glands are very apt to become enlarged and tender, and in strumous, ill-nourished, and neglected children glandular suppuration may occur. Among this class the affection frequently coexists with paronychia and ulcers of the conjunctiva and buccal mucous membrane. It is said to occur with especial frequence in female children and in the spring, although neither sex nor season is exempt.

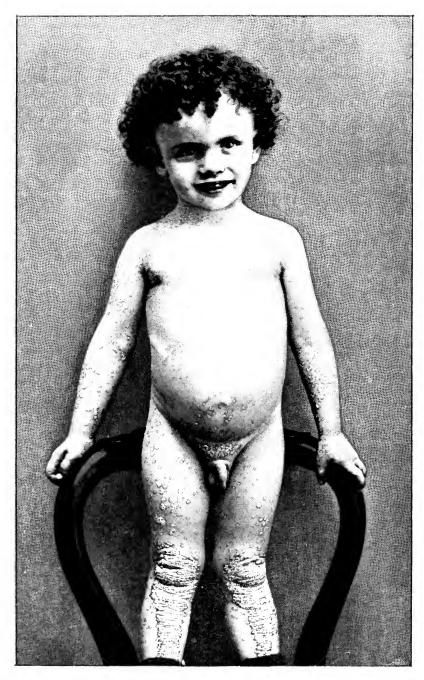
The upper illustration in the accompanying plate shows crusted lesions upon the forehead and scalp, and a secondary conjunctivitis which has closed the right eye. Upon the hand a number of incipient pustules are seen, exceriated upon the fingers, but tolerably well developed upon the wrist. Upon the forearm, in the lower illustration, a few typical flattened and umbilicated lesions may be seen, while upon the arm an ecthymatous patch has resulted from the coalescence of several scratched and crusted lesions. In Fig. 10 the eruption presents its characteristic appearance in the form of numerous isolated crusted lesions. In Fig. 11 a few lesions have coalesced upon the lips and formed a large, crusted patch resembling impetiginous eczema. In Fig. 12 the lower lip is similarly affected, while upon the forehead the isolated lesions present a typical appearance.

While the individual lesions of contagious impetigo run an acute course of a week or ten days, the development of new lesions and the irritation produced by scratching often keep up the eruption for many weeks. In its treatment cleanliness is of the utmost importance, especially as the affection is most likely to occur among children whose ablutions are neither frequent nor thorough. The finger nails may be advantageously cleansed and cut, and a disinfectant lotion, such as listerine or a saturated solution of sodium hyposulphite in rosewater, should be applied frequently to the affected skin. To remove crusts and heal superficial ulceration an excellent application is a mixture of equal parts of white precipitate ointment and cold

cream.

war and the second





Propiasis

From the collection of photographs of

Dr. George Houry Tex.

PSORIASIS.

PSORIASIS, though most frequently met with after the age of puberty, is by no means a rare affection in childhood and may even occur in infancy. Though different cases present a notable variation in their clinical appearance, the characteristic features of the disease are very much the same at all ages. The eruption is always dry and scaly, whatever may be the age of the patient, but in childhood it is not generally so well developed and so extensive as it is apt to be in later years.

Psoriasis begins in the form of one or more red points, which quickly become covered with white, silvery scales (Fig. 13). These may be readily scratched off by the finger nail, and when this is done a bleeding surface is exposed. When many of these small, scaly lesions are present the eruption is described as punctate psoriasis, and this form of the eruption is comparatively more frequent in children than in adults; when the scaly lesions increase in size and appear like drops of grease or thin mortar spattered over the skin, we have the guttate form of the disease (Fig. 14); and when the patches assume the size and shape of silver coins they are often described as nummular psoriasis (Fig. 15). By healing in the centre these lesions may be converted into scaly rings, or by peripheral increase and coalescence they may result in the formation of extensive scaly patches (Fig. 16). Diffused or general psoriasis is, however, rarely met with among children.

The amount of scaliness present in any case depends upon the attention which the patient naturally devotes to his skin. If baths are frequently taken, and especially if any fat or oil is rubbed over the patches, the scales are generally absent and the eruption presents a tolerably smooth, reddened appearance. When no attention is paid to the care of the skin, the scales often accumulate upon the psoriatic patches until they are very prominent and present a silvery-white or dirty-yellow appearance. As the eruption tends to disappear the scaling grows less, often disappearing from the centre of the patch and leaving a marginate ring. Finally the redness fades and the skin assumes a normal appearance, except in certain cases where pigmentation may occur.

In rare cases of psoriasis the eruption may tend to rapidly involve the whole skin. The cutaneous congestion is severe, and large flakes of partly detached epidermis may take the place of the silvery scales. In other words, an attack of acute



Fig. 13.—Punctate lesions covered with white scales.

dermatitis exfoliativa has set in and complicated and obscured the psoriasis. When the dermatitis has subsided the psoriasis is very apt to reappear.

Psoriasis is not only a dry and scaly eruption, but it is invariably marginate. Whether occurring in small discs or in large, irregular patches, the border is always sharply defined and never shades off gradually into the surrounding healthy skin, as does the ordinary patch of eczema. This is a diagnostic point of great importance. In many cases of eczema the

patches may be dry and scaly, and present a resemblance to those of psoriasis, but the rounded, silvery discs or larger marginate patches of the latter disease are usually so characteristic that an error in diagnosis is not likely to be made.

The localization of the eruption is another important diagnostic point. While eczema may appear upon almost any part of

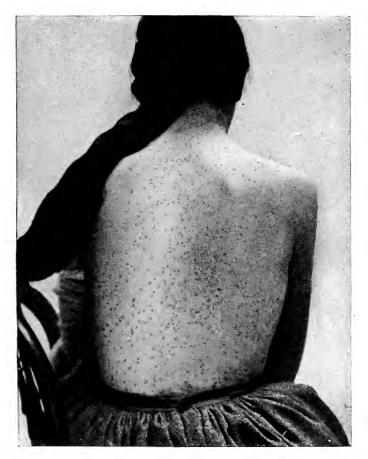


Fig. 14.—Guttate lesions with scales washed off.

the body, and often exhibits a tendency to attack the flexor aspect of the joints and other parts where the skin is thin and delicate, psoriasis is commonly seen upon the extensor surface of the extremities and is especially apt to be noted about the elbows and knees. Upon the scalp the two affections often present a strong resemblance, but in psoriasis the scaly patches

are apt to be small, numerous, and circular, with healthy skin intervening, while eczema of the scalp usually occurs in one large, diffused patch.

The symmetry of the eruption in psoriasis is also a characteristic feature. The eruption upon one extremity or one side

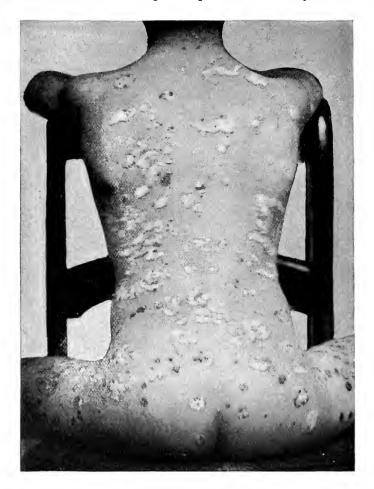


Fig. 15.-Nummular and circinate psoriasis.

of the trunk is usually duplicated upon the other side, while eczema is very frequently unilateral.

The papular syphilide often assumes a squamous form and presents for a time a strong resemblance to psoriasis. Fortunately it is rarely met with in childhood, but at any age it

differs from psoriasis in one respect. While in the latter affection the infiltration of the skin is slight and the accumulation of scales a prominent feature, in the papular syphilide the infiltration of the skin is considerable and the scaling is comparatively slight.

It is a noteworthy fact that many patients suffering from



Fig. 16.—Patches healing in centre, enlarging and coalescing.

psoriasis are unusually well developed and robust in appearance. It is not, like eczema and certain other skin affections, a disease of the weak and the neglected, but one which seems to delight in attacking those who are strong and well nourished. In any case, however, where the tendency to psoriasis exists, the eruption is certain to be most severe whenever the patient is weakened by lack of proper food or by overwork.

The tendency to psoriasis is frequently inherited, and often the disease may be observed in two or more generations. Not infrequently it shows a tendency to skip a generation, and it has been claimed that psoriatic subjects are the offspring of eczematous, dyspeptic, asthmatic, gouty and rheumatic, as well as of psoriatic parents. External irritation only produces the disease in those who manifest a predisposition to it.

While it is often an easy matter to remove the eruption by treatment, it is difficult, if not impossible, in many cases, to prevent its speedy return. The eruption shows a marked tendency to relapse or to increase in severity in the spring or at some particular season, and in many cases persists for years or even throughout a lifetime. It often improves or disappears spontaneously for a few months or even for a year or more, and then reappears and continues its fluctuating course. The prognosis, therefore, is always a grave one as regards the permanent cure of the disease; but, in spite of the fact that some have declared psoriasis to be incurable, there are many cases which get well and remain well.

In the treatment of psoriasis a host of remedies have been employed, and many of them owe their repute to the fact, already stated, that the eruption tends at times to disappear spontaneously, and to any remedy employed at such a time the credit of a cure would naturally be awarded.

Among internal remedies, arsenic is the one most commonly employed and probably the most efficacious. In many cases, however, it may do much more harm than good. When the skin is irritable and the psoriatic patches congested, arsenic is worse than useless and alkaline diuretics are greatly to be preferred. But, on the other hand, when the disease is tending to get well, the administration of arsenic will often produce a most brilliant therapeutic result.

Of the various local remedies employed, chrysarobin stands without a rival. In many cases it produces a speedy and brilliant result which can be attained by no other local application. It has serious objections, however, which often forbid its use. When the skin is irritable it may cause the eruption to spread. Like arsenic, it is most likely to do good when the acute congestion of the psoriatic patches has subsided and the eruption is tending toward a spontaneous improvement. It not only stains the skin temporarily—which, however, is a matter of little importance—but it permanently discolors the underclothing and the bed linen, if due precaution is not taken. When

rubbed in where the skin is thin, or near it, as, for example, the axillæ and flexures of the joints, it often excites a very unpleasant dermatitis for a few days; and when by chance a little of the ointment gets into the eye a very severe conjunctivitis often results. This chance is somewhat lessened by applying the drug in the form of a varnish composed of gutta-percha solution or collodion, but then its therapeutic effect is decidedly lessened. Upon the trunk and extremities a five or ten per cent ointment, made by rubbing up finely sifted chrysarobin in vaseline, can be advantageously used; but upon the scalp and face the ointment of ammoniated mercury will generally prove efficacious, and is to be preferred to the chrysarobin.

Prolonged baths are often of service in macerating the scaly patches, and, when the skin is not too irritable, soap frictions are valuable in removing the scales and preparing the skin for inunction. In many cases, however, owing to the intense congestion of the affected skin, a hot bran or alkaline bath will prove more agreeable than the use of soap.





Ichthyposis
From the collection of photographs of

Dr. George Henry Fox.

ICHTHYOSIS.

ICHTHYOSIS is a deformity or an imperfect development rather than a disease of the skin. Like all deformities, it is very apt to be hereditary, affecting one or more members of a family, and often skipping a generation. It is characterized by a marked deficiency of the normal cutaneous secretions and a tendency to the formation of a dry, scaly surface, which suggested the name of "fish-skin disease." It is sometimes congenital, may indeed develop in utero. but often does not manifest itself until several months after birth. In rare instances it may develop late in life. Though always improved by judicious treatment, it may be considered as one of the incurable dermatoses, since the peculiar character of the skin cannot be changed.

There are various degrees of severity in which ichthyosis may manifest itself, and different names applied to these have led to some confusion as to their true character. For instance, the term xeroderma, or "parchment skin," has been used unnecessarily to designate a very mild form of ichthyosis in which the skin presents a dry, mealy appearance, especially apt to be noticed in children with whom bathing is a rare luxury. In some cases this slight ichthyotic tendency disappears in time, and sometimes appears in later life as an acquired condi-It should be borne in mind that as the hair in some children is preternaturally dry and in others unusually oily, and that as this condition may vary in the same individual according to the state of health, so the degree of natural oiliness or dryness of the skin may vary greatly in individuals and in accordance with season and general condition. A skin which is notably dry and with a tendency to chap or roughen might be regarded as xerodermatous or ichthyotic in a very slight degree.

In ichthyosis mitis (or simplex) the characteristic features of the affection are well developed. The skin is dry, and perspiration is slight even in warm weather. Upon the extensor aspect of the extremities the epidermis presents often a peculiar serpentine appearance, resulting from the cracking of the horny layer into polygonal plates, which in time assume a dirty gray or greenish tint. These plates adhere by the central portion,



Fig. 17.-Ichthyosis.

while the margin tends to separate from the underlying skin. Around the elbows and knees the natural wrinkles are greatly intensified, and the breaking of the horny epidermis occasions a large number of concentric, whitish lines separating rows of warty elevations. As a rule the flexures of the joints, axillæ, groins, genitals, palms, and soles are but slightly if at all

affected. The face usually presents a characteristic appearance, the cheeks being roughened or chapped, the eyelids stiffened and drawn into a condition bordering on ectropion, the lips dry, and the oral commissures more or less wrinkled. The hair is usually dry and sparse upon the scalp, and may be entirely absent upon those portions of the trunk and extremities where a slight growth is usually present. The nails are apt to be dry and brittle.

In cases of ichthyosis of a severe type in which no treatment is instituted and the ordinary use of soap and water is neglected, the epidermis becomes broken into small plates, which increase in thickness until the affected skin upon the extensor aspect of

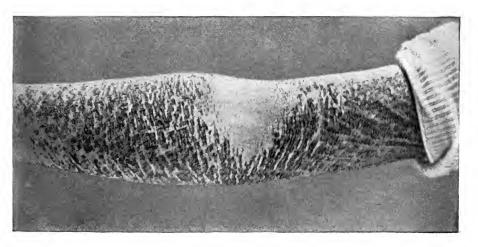


Fig. 18 -Ichthyosis with broken epidermis.

the extremities is covered with more or less conical, blackish masses and resembles the bark of a tree. To this condition the term ichthyosis hystrix, or "porcupine skin," may be applied. It should be borne in mind, however, that this term is often used to designate a linear warty condition occurring in parallel streaks, usually upon one side of the body (nævus verrucosus), and which has no clinical relation to ordinary ichthyosis.

The severest form of the disease is one which develops in utero and is frequently fatal shortly after birth. This has been described as "diffuse congenital keratoma," "harlequin fœtus," etc. Dr. George G. Wheelock in a report of a case '

¹ Illustrated Quarterly of Medicine and Surgery, July, 1882.

states that the forceps were applied through the os and the child was with considerable difficulty extracted, there seeming to be a total lack of lubrication and consequently great friction between the fœtal and maternal parts. As the head was born a thick plate of skin two inches square was detached and escaped with the head. At first the child had the appearance of a dead fœtus with macerated epidermis, but shortly it began to breathe and to cry feebly. Its appearance was horrible in the extreme. It was covered from head to foot with a skin like leather, deeply fissured and broken up into plates like an alligator or an armadillo. Many of the plates were separated from the true skin, which was of a bright strawberry color. After birth the dried

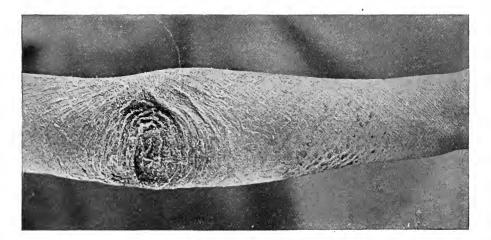


Fig. 19.—Ichthyosis with fine scales.

skin became of a bright chrome yellow, and the plates were more and more detached by the motions of the child, which lived only six hours. Another case has been reported of a woman who had three healthy children by her first husband and three ichthyotic fœtuses by her second. Cases have also been reported of this severe form of the disease developing after birth.

Occasionally one of these cases of severe congenital ichthyosis may survive. A youth known to fame as the "Alligator Boy," and exhibited in a dime museum some years ago, was described by the writer in the *Journal of Cutaneous and Venereal Diseases*, April, 1884. The eruption, contrary to the rule, was most marked upon the trunk, the epidermis being

broken by movements of the body into polygonal, horny plates of varying size and of a dirty-yellowish hue. In winter the skin upon the trunk was smooth, though thickened and horny in character. In the spring this horny integument was wont to crack and present the characteristic alligator appearance,



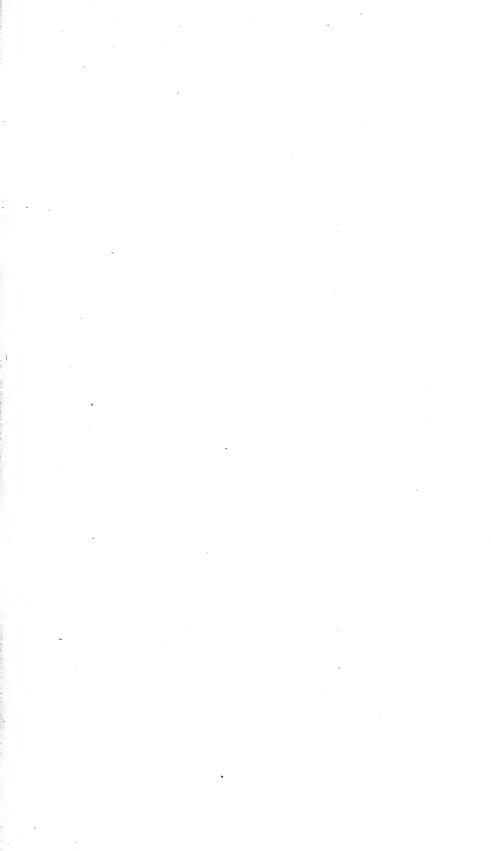
Fig 20.-Polygonal plates of ichthyosis.

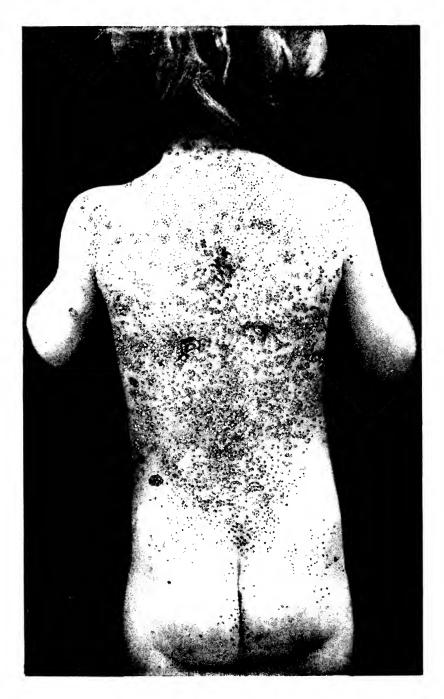
while the hair of the head was almost entirely shed. At birth, according to Dr. F. Kennedy, the child presented a most extraordinary appearance. The skin was smooth, as if polished, and of a deep-red color. It was impossible for the child to make use of its facial muscles in its efforts to cry or suck. After a

few days fissures occurred and armor-like scales were formed, which gradually peeled off. This case was evidently of the same nature as those reported by Wheelock, Kyber, and others, but not so severe as to cause death.

Heredity is the only cause which can be suggested for the occurrence of ichthyosis, but often the parents and grand-parents are said to have been free from this or any other form of skin disease. The sexes are about equally disposed to the affection.

The treatment of ichthyosis is of necessity palliative, as the cause cannot be removed, but even in the severest cases the skin can be softened and restored temporarily to an almost or quite normal condition. To maintain this condition a considerable amount of persistent daily lubrication of the skin is required. The use of fatty articles of food, such as cream, eggs, etc., is to be recommended; and cod-liver oil will often prove serviceable, although it may not be necessary to use it internally, externally, and eternally, as has been suggested. Indeed, for local application the fats and oils do not generally prove as agreeable and effective as does diluted glycerin. A half-ounce of this added to a pint of rosewater (or rainwater) makes an excellent lotion, which can be readily rubbed over the extremities, or whole body if necessary, every night and morning. When the disease is complicated by eczema, as often happens, a soothing ointment or paste is called for.





Cozernia.

Dr. George Henry Fox.

ECZEMA.

ECZEMA is at all ages the most important skin disease which the physician is called upon to treat. In infancy and childhood it is especially common, and usually a source of great discomfort to the patient. A full discussion of the subject would require much time and space, and in the few pages allotted to it here only a few points can be briefly mentioned and a few practical

suggestions offered.

Eczema is an inflammation of the skin, of which the symptoms are commonly redness, thickening, moisture, crusting, and itching. The disease may present a great variety of appearances, according to the locality involved and the duration and severity of the inflammation. It may bear a resemblance to nearly every other skin affection, but in most cases, especially in childhood, the disease is readily recognized. Unlike many other cutaneous affections, it has no characteristic lesion, but may be erythematous, papular, vesicular, or pustular at the outset and gradually become crusted, scaly, fissured, or ulcerated. As regards the grade of inflammation, the disease may be observed in an acute, subacute, or chronic form, and as regards duration it may in one case be insignificant and ephemeral while in another case it may persist or recur year after year.

A multitude of adjectives have been applied to the numerous and varied clinical forms of eczema, and are useful for purposes of description, but the main thing for the physician to learn is to recognize the eczematous nature of the eruption, and to remember that different clinical forms may coexist upon different portions of the body and that one form is very likely to develop into another as the eruption becomes better or worse.

Eczema in childhood, as in later years, may occur in either an acute or chronic form. These terms, as commonly used, indicate the grade of inflammation rather than the length of time which the eruption has existed. In the acute form there is much redness, heat, and swelling, while in the chronic form there is usually more thickening of the skin. An acute eczema often runs a typical course, which may be divided into three stages. These are, first, the stage of congestion and vesiculation; second, the stage of moisture and crusting; and third, the stage of desquamation. The vesicular condition is always transitory, and in many cases is not present. The effusion of serum may be so intense as to loosen and wash away the epi-

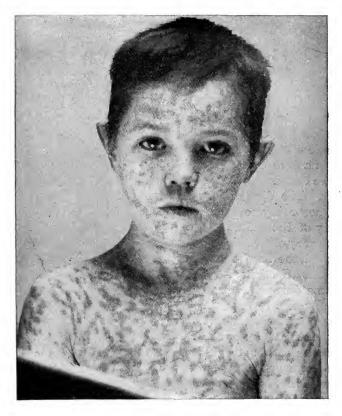


Fig. 21.—Eczema squamosum.

dermis in a mass, thus leaving the typical raw, red, exuding surface; or, on the other hand, the serous effusion may be so slight as not to appear upon the surface, and the eruption passes directly from the congestive into the squamous stage. The outbreak of acute eczema is attended by more or less fever and restlessness. Repeated exacerbations often characterize the course of a chronic eczema, during which the eruption assumes an acute form.

ECZEMA. 43

There are four types of eczema which it is well to differentiate and of which a brief description may be given. The first is erythematous eczema, in which redness and slight scaling are the chief features. It is usually a dry and mild form of the disease, and was formerly described as a distinct affection under the name of pityriasis. It is frequently seen upon the face and hands of children, and appears like a roughened or chapped con-



Fig. 22.-Eczema squamosum.

dition of the skin. About the genitals and wherever folds of skin are in apposition it is apt to follow the affection known as erythema intertrigo, and in many cases, indeed, it is difficult to distinguish between the two, as one gradually develops from the other. In erythema we have simply congestion of the skin, while in eczema erythematosum there is a slight thickening from serous infiltration of the cutaneous tissues and a tendency

to the development of a moist surface when the skin is scratched or rubbed. Neither papules nor vesicles are present in this form of the disease. The eruption is usually limited in extent, although it may occur acutely in the form of numerous small, rounded or oval patches scattered over the face, trunk, and extremities (Figs. 21 and 22).

In the erythematous eczema of childhood itching is not apt to be severe, although in adults this form occurring upon the



Fig. 23.—Eczema rubrum.

forehead, about the eyes, and elsewhere is apt to produce considerable thickening of the skin and a most intolerable pruritus.

In papular eczema, which was formerly described under the head of lichen simplex, we find irregular groups of bright-red, acuminate papules, many of which become excoriated and tipped by a minute blood crust, and some of which tend to run together, when sufficiently numerous, and form a thickened, scaly, or crusted patch. The accompanying plate shows a well-marked case of this form of the disease.

Vesicular eczema is a form rarely met with, since the natu-

ECZEMA. 45

ral duration of a vesicle rarely extends over a few days, and the itching which accompanies the eruption is certain to cause the lesions to be torn and the surface to become crusted by the drying of the serous exudation. And yet this aggregation of numerous minute, rounded, glistening vesicles upon a red and swollen surface of skin is perhaps the most characteristic phase of the disease. It was formerly believed that this was essentially a vesicular disease and that these lesions must be



Fig. 24.-Eczema impetiginosum.

present at the outset in every case of true eczema. The vesicular stage, when present, is attended with great heat and burning. The vesicles quickly rupture or coalesce, the epidermis cracks, and a surface exudation of a clear serum takes place. This is of a mucilaginous character, stiffens hair or linen with which it comes in contact, and dries like a varnish upon the inflamed surface, which quickly cracks, however, and thus allows the discharge to ooze out at many points. When the inflammation is very severe the greater portion of

the inflamed surface, instead of being crusted, appears swollen, moist, and of an angry red hue (eczema rubrum) (Fig. 23).

Pustular eczema results from an inflamed surface of skin becoming infected by pyogenic cocci. The characteristic oozing or "weeping" surface may gradually become purulent, and the exudation may dry into an extensive, thick, yellowish or honey-like crust (eczema impetiginosum) (Fig. 24); or a group of isolated follicular pustules or minute superficial abscesses may develop and become crusted, in which case the



Fig. 25.-Eczema pustulosum.

eruption bears a strong resemblance to contagious impetigo. This form of the disease is especially liable to occur in children of a strumous habit and among those who are not distinguished for their personal cleanliness (Fig. 25).

The squamous form of eczema is secondary to one of the preceding types. Indeed, a more or less scaly condition of the skin is seen in every patch of eczema before recovery takes place, and this may be regarded as the final stage in the course of the eruption. The amount and persistence of the scaling depend upon the extent of the infiltration of the skin. The

ECZEMA. 47

desquamation in eczema is always slight as compared with psoriasis, and the margin of the scaly patch usually shades off gradually into the surrounding healthy skin, instead of being circumscribed and abrupt as is always the case in the latter disease.

In the eczema of infancy, which is a very common and often a very obstinate affection, the face and scalp are usually affected, and frequently portions of the trunk and extremities suffer to a less degree. The characteristic tendency of the eruption to assume the moist form usually manifests itself, and the face appears either inflamed and angry or covered by dried exudation in the form of yellowish or blackish crusts. The little patient often suffers intensely from the oft-recurring pruritus, rolling his head in vain attempts to alleviate it by rubbing the inflamed skin against his clothing, or, if old enough to use his hands, tearing the face and causing it to bleed by sudden, fierce, and unexpected dabs with his sharp finger nails.

The cause of eczema might be discussed at great length and still little light thrown upon the subject, for it is certainly an obscure one. It may suffice to assert that improper food and imperfect digestion are the most frequent causes of the affection as it is met with in infancy.

Infantile eczema has usually nothing to do with the teeth. It often appears before teething begins, and a similar eruption may occur in old age when all the teeth are gone. Furthermore, it is always amenable to proper treatment, whether the child has one or twenty teeth. When the process of cutting teeth interferes with the general health of an infant, it is possible for the eruption to be indirectly aggravated by the condition of the gums, but in no case is "teething" ever to be regarded as the sole cause of eczema.

The "coming-out" of eczema is never a source of thankfulness, unless it happens to come out on some other baby than our own. We might be thankful if it were to come out in the baby's clothing, and it is about as likely to do this as it is to affect any of the internal organs. Eczema is essentially a disease of the skin, and cannot be transferred to the brain or lungs any more than the ruddy glow of a healthy cheek can be "driven in." It is true that sometimes an ointment is applied to an eczematous scalp or face, the eruption quickly disappears, and shortly after the baby may die of brain or lung disease. This may appear at first thought as though the eruption had been driven in, but the facts admit of a more reasonable explanation. When from exposure to cold or some other cause an inflammation of the brain or lungs results, the blood flows in an unusual quantity to the affected organ, and any eruption upon the skin soon begins to fade and disappear. This, of course, takes place whether any ointment be applied or not. In such a case it might be said, with perhaps more truth, that the eruption has been drawn in, but it is evident that the disappearance of the skin disease is the result and not the cause of the internal inflammation.

The common belief that a skin disease is the outlet of some poisonous or vicious material in the blood is quite erroneous, and, in the light of modern pathology, a most absurd idea. eruption can never be justly considered as either useful or beneficial to a patient. When a physician is unable to cure a case of infantile eczema, it may serve a purpose to claim that the eruption is salutary and that its sudden removal by local applications would be liable to produce disastrous results. truth, however, is as follows: An eczema ought always to be cured as speedily as possible. This can always be done without the slightest danger of any harm to other organs of the body. Physicians of the largest experience in the treatment of skin diseases will all agree upon this point, and the sooner the old idea of the metastasis or translation of eczema is given up, the better it will be for the health of future babies and for the comfort of those who have the care of them.

In the treatment of eczema in infancy and childhood, it is well to remember that the disease is inflammatory in character, usually acute or subacute, and that our main object should therefore be to soothe the congested skin. If there were a law in this country prohibiting the use of any ointment save the officinal unguentum zinci oxidi, what a blessing it would be to children with acute eczema! As it is now, the physician is usually disposed to regard zinc ointment as little better than a domestic remedy, it being so well known. Familiarity with it has bred contempt. It will not do, he argues, for a man of his experience and reputation to prescribe so common and simple a remedy, and so he adds to it a little ichthyol and a little resorcin and a little carbolic acid, or possibly some one of the "new remedies" with which the general practitioner is usually familiar long before the specialist is willing to try them: result is that the druggist is called upon to rub up a salve in which the bland, emollient character of the simple zinc ointECZEMA. 49

ment is completely lost—a salve which is certain to irritate the delicate and inflamed skin and to aggravate the eruption.

More than a quarter-century ago Erasmus Wilson decided. after years of experience, that in acute infantile eczema the best method of treatment was by laxative doses of calomel and the external use of zinc ointment. While not unmindful of the progress which dermatology has made during this time, and in face of the flood of new remedies which is constantly pouring into our drug market, I defy any one in dermatological or pediatric practice to lay down a general method of treatment which, in the average case of infantile eczema, is practically superior to the one suggested by Wilson. A little starch or talcum added to zinc ointment will stiffen it and cause it to dry upon the skin, and thus obviate the necessity of smearing cloths and holding them in place by a bandage or mask When a patch of eczema has ceased to exude and is in the final or squamous stage, a little oil of cade (one to five per cent) added to the zinc ointment or paste will greatly increase its efficacy in restoring the skin to a normal condition.

The tendency of soap and water to aggravate a moist eczema and to nullify the best of treatment is now generally understood by the profession. Indeed, the knowledge of this fact often leads the physician to forbid bathing in cases of dry eczema, when a daily bath would tend to improve the condition of the skin and benefit the patient. It is only in acutely inflamed and exuding eczema that water is necessarily injurious.

The regulation of the diet in case of eczematous children is of the utmost importance, as here may generally be discovered the cause of the eruption. With children old enough to go to the table, and especially with those who are apt to get whatever they cry for, a restriction of the diet to pure milk will often do much toward effecting a cure. It is very difficult to lay down dietetic rules of general application, for what will prove best suited to some children will fail to agree with many others; but it is certain that whenever a judicious local treatment appears to have little effect upon the eruption, the closest attention to the diet and condition of the stools becomes imperative. In many cases the local treatment which has produced no beneficial effect will work like magic as soon as the bowels are freely opened and the digestion improved.

The administration of arsenic, antimony, and other powerful

drugs may possibly do good in certain cases, but as I have seen arsenic, at least, do harm in a score of cases for every one in which I have seen it do good, I have no hesitancy in dispensing with their use in treating eczema in infants and young children. Arsenic should certainly never be given in the acute eczema of childhood nor during the exacerbations of the chronic form.





PAPILLOMA LINEARE.

From the collection of photographs of Dr. GEORGE HENRY FOX.

PAPILLOMA LINEARE.

The affection of the skin to which attention is now briefly called under the name of linear papilloma is somewhat rare and is described in the text books of dermatology under a variety of It is frequently congenital, often develops in childhood, but may first appear in later life. It is characterized by warty excrescences, either colorless or pigmented, occurring in small groups running in one or more lines for some distance over the surface of the skin and frequently appearing upon only one side The neck, trunk, or one of the extremities may be the seat of the disease, and in rare cases the greater portion of the body may be affected. In congenital cases the warty outgrowth is apt to be fibrous and tough, while in cases developing later in life the lesions are softer, sometimes slightly scaly, and far more amenable to treatment. In some cases they have been known to disappear spontaneously or after some cutaneous exanthem, but a tendency to reappear upon the same site is usually manifested.

Of the names which have been applied to the affection the following may be mentioned: ichthyosis hystrix seu localis, ichthyosis linearis neuropathica, nævus verrucosus, nævus unius lateris, nerve nævus, and papilloma neuroticum.

The dark, fissured masses sometimes observed about the elbows and knees in severe cases of ichthyosis bear some resemblance to the warty lines seen in this affection, but they are simply accumulations of epidermis and not papillomatous in character. In linear papilloma, however extensive it may be, there is nothing suggestive of ordinary ichthyosis, and the statement made by some writers that a xerodermatous or parchment-like condition of the skin often coexists with papillomatous streaks is by no means in accord with my experience. The disease in question might be classed with ordinary verruca (warts) more justly than with ichthyosis.

The term nævus verrucosus would be applicable to this affection, but the fact that this name is commonly applied to the soft, flattened, pigmented, warty outgrowths so frequently seen upon the backs of old men and women renders its use objectionable in case of the disease under consideration. Nævus unius lateris is descriptive of most cases of this affection, but the fact that it may occur on both sides in certain cases may cause the name to sound absurd at times.



Fig. 26.-Linear papilloma.

The papillomatous streaks of this disease (like zoster) run transversely upon the trunk and longitudinally upon the extremities. They run in the direction of the natural cleavage lines of the skin, and, though they usually appear to follow the cutaneous distribution of certain nerves, they do not always do this with any great degree of accuracy. It would seem, therefore, that the name of linear papilloma as a descriptive title was preferable to the term nerve nevus or papilloma neuroticum.

In the accompanying plate, illustrating a case presented to the New York Dermatological Society by Dr. Cutler, the linear character of the affection is plainly shown in the streak coursing down the thigh and leg. In Fig. 26 the verrucous surface of the patch is quite apparent, while in Fig. 27 is seen the tendency of the lesions to form a broad, pigmented, warty patch in the axilla, from which a single line runs down the inner surface of the arm.



Fig. 27.-Linear papilloma.

The treatment of linear papilloma consists in the use of agents which tend to destroy or remove the excrescences. In cases of recent development, where the lesions are soft, the repeated application of a saturated solution of salicylic acid in collodion will act as effectively as it usually does in the case of corns and warts, and will soon leave the affected skin in a normal condition. In cases of longer standing it is advisable to use the curette, and where the eruption is extensive to remove

small portions of it at a time. But in certain cases, especially those which have existed since birth, the lesions are apt to be of such a dense fibrous character that the curette is of little use, and their removal is best effected by means of the curved scissors. It is doubtful whether any internal remedy is capable of affecting the growth in any notable degree.



Plate VIII.





Nævus pilosus.

From the collection of Photographs of Dr. George Henry Fox.

NÆVI, PIGMENTED AND HAIRY.

The term nævus signifies a spot or blemish upon the skin. It is usually a congenital affection, although certain forms of skin disease to which the term nævus is commonly applied may occur in youth or later in life. Many nævi, especially of the pigmented and hairy variety, exist at birth, but are almost imperceptible, and only become noticeable when they develop, as they are apt to do, after the age of puberty.

The term nævus includes affections of widely different pathological character in which hypertrophy is the only common element. They may be classed as fibrous, pigmented, hairy, and vascular nævi. The fibrous or hypertrophic nævus frequently occurring upon the face in the form of a small, rounded, and non-pigmented tumor or mole is peculiar to adult life, but the pigmented and hairy forms of nævus are common in childhood and often require treatment at an early age.

Nævus pigmentosus is the result of an excessive deposit of pigment granules in the mucous layer of the skin. It differs from a freckle or chloasmic discoloration (which are acquired affections and liable to disappear spontaneously) in appearing at or soon after birth and being permanent. The pigmentary nævus varies greatly in color and size. It may be yellowish or of a deep-brownish hue. It may be no larger than a pin's head, in which case it is apt to be multiple, or it may cover a portion of the body larger than the hand. The face, neck, and back of the hand are favorite sites, but it may appear on the trunk and extremities. It is sometimes flat and smooth, like a freckle, but may become elevated and warty in certain cases, when the term nævus verrucosus is applicable.

In many cases of extensive pigmentary nævus, whether smooth or elevated, we find a growth of fine or coarse hair upon the surface. When this is more marked than the pigmentation the affection is called nævus pilosus. The hairy nævus is often a small oval patch (as in the plate), and from its size and shape its origin is frequently ascribed to some maternal impression—e.g., the mother having been frightened by a mouse. Often the hairy scalp appears to extend over the temple or upon one side of the forehead, as in Fig. 28, and not infrequently it is seen

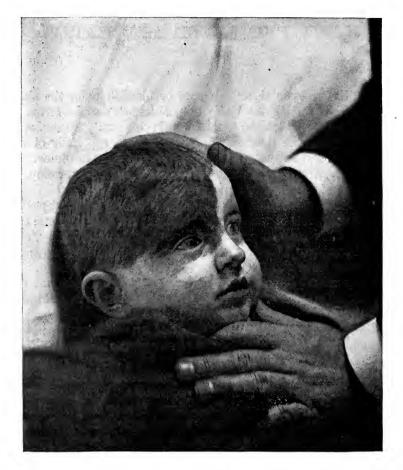


Fig. 28.

upon the cheek beneath the eye or involving both lids and vicinity, as in Fig. 29.

In rare cases a large extent of cutaneous surface is affected, and the whole trunk may appear as though covered with fur instead of normal skin (Fig. 30). The lumbar or pelvic region is also apt to be the seat of the hairy nevus, which in some cases has suggested a resemblance to "bathing-tights." The congenital growth rarely increases in extent, except as the body grows larger, but often the pigmentation becomes more pronounced and the hair begins to grow coarser in adult life. The development of small hairy moles upon the face of elderly



Fig. 29.

women, especially those suffering from hypertrichosis, is very frequently noted.

In the treatment of the pigmentary mole, acids or the electrolytic needle may be employed. For small, round, dark spots on the skin a minute drop of nitric acid, applied with a wooden toothpick, will often suffice to remove the blemish. In case of larger pigmented patches, either smooth or covered with fine hair, the surface of the skin may be dotted with the acid; but

extreme caution must be used to prevent ulceration, lest scars be left which would be far more disfiguring than the nævus itself. With children old enough to bear a little pain without crying, the pigmented spots may be blistered by touching them with the point of the electrolytic needle or by passing it superficially through the epidermis.

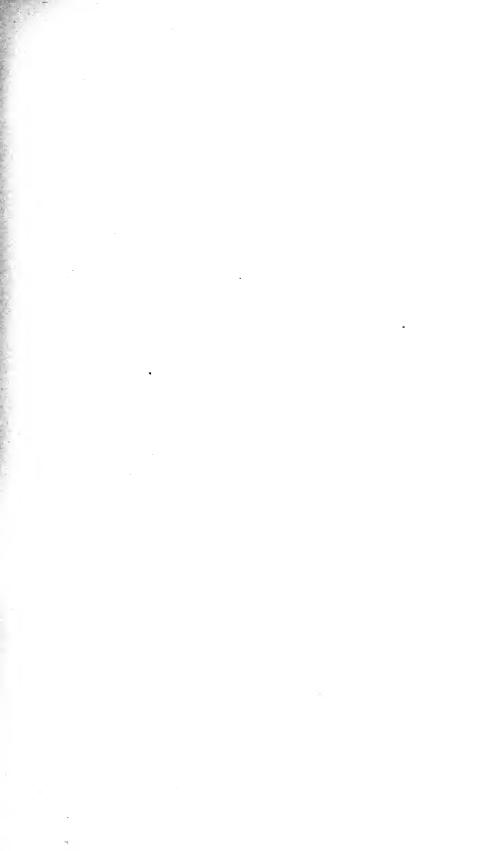
In nævi of small or moderate size covered with coarse hair



Fig. 30.

the electrolytic needle may be used, as in the treatment of hypertrichosis, and a fine result attained through patience and perseverance. In the *Journal of Cutaneous Diseases* for May, 1893, the writer has reported a case of extensive hairy and verrucous nævus involving the right cheek and lower eyelid, which was completely removed by means of electrolysis. The treatment consisted in carefully passing a fine, flexible steel

needle, connected with the negative pole of a galvanic battery, through the most superficial portion of the growth, the circuit being completed by the patient grasping a moist sponge attached to the positive electrode. This was repeated until the electrolytic destruction of tissue reduced the growth to the level of the surrounding skin, removed the pigmentation, and to a certain extent destroyed the hypertrophied hair follicles. slight growth of hair which persisted after the affected skin had become smooth and comparatively normal in color was destroyed by the introduction of the electrolytic needle into each separate follicle, according to the method employed in the treatment of superfluous hair. The young man now presents not the slightest deformity of the eyelid, and scarcely a trace, upon close inspection, of the dark, warty, and hairy growth which formerly attracted attention wherever he went and was the source of great mortification.







 $Vascular\ Nævus.$ From the collection of Photographs of Dr. George Henry Fox

VASCULAR NÆVUS.

The vascular form of nævus results from an excessive development of vascular tissue in or beneath the skin, and presents a variety of clinical appearances. These may be conveniently classified as follows: 1, nævus araneus; 2, nævus flammeus, or port-wine mark; 3, nævus tuberosus; and 4, nævus cavernosus. Of the many descriptive names which have been more or less in use, these appear to best express the characteristic features of the four clinical varieties of vascular nævus.

Nævus araneus consists of a small red spot, smooth or slightly elevated, from which several dilated capillaries radiate like the legs of a spider. It has sometimes been called "spider cancer," a name which is as alarming as it is inappropriate. It is not always congenital, but frequently appears in youth or adult life as the result of a prick, bruise, or other injury to the skin. On this account some writers class it under the head of telangiectasis or acquired vascular dilatation, assuming that the term nævus signifies a birthmark and not merely a spot or blemish. It is most frequently noted upon the upper portion of the face, and upon a fair white skin may be quite conspicuous and annoying.

Nævus flammeus, birthmark or port-wine mark, as it is commonly called, usually appears as a smooth, red discoloration upon one side of the face. It varies greatly in size, often extending down upon the neck and involving a considerable portion of the trunk. It varies also in color from a light pink to a deep purplish-red or even slate-colored hue. In its severe form the affected skin is elevated, the lip greatly swollen, and one side of the face may appear notably larger than the other. The dark surface of the skin may be dotted here and there in some cases by small vascular excrescences. At birth small, faint red marks may be noted, especially upon the lower portion of the occiput, which tend to disappear in later years, but the portwine mark usually persists throughout life, either remaining unchanged or becoming more conspicuous. It has been claimed

that some cases have increased in area and that others have gradually disappeared, leaving atrophic scars, but such cases are notable exceptions to the rule.

Nævus tuberosus is a turgescent tumor of varying size with a rounded or flattened surface. It results from a congenital dilatation or new formation of blood vessels, and in color varies from a bright cherry-red to a purplish-red or leaden hue, according to the predominance of arterial or venous blood in the



Fig 31.-Nævus of nose.

tumor. It is frequently seen upon the scalp and face, although it may be found upon the trunk and extremities. It usually increases somewhat in size during the early months of infancy, and in some cases develops with such alarming rapidity that vigorous treatment is called for without delay. The tumor is usually elastic and compressible, and often varies in size and color at different times of day, and is especially prominent after a fit of crying or severe coughing. A distinct pulsation may

be sometimes felt, corresponding in rhythm with the action of the heart. Ulceration of the central portion of the surface occasionally takes place, and from this cause or from some accidental injury severe hemorrhage may result. Gangrene may occur and produce a spontaneous cure.

Nævus cavernosus is a deep-seated form of angioma over which the raised skin may appear of normal hue or present a dull-bluish or venous appearance. The tumor is formed by



Fig. 32.—Birthmark of unusual extent.

masses of dilated veins and arteries surrounded by firm connective tissue, which extends into the interior and forms vascular cavities communicating freely with the enlarged vessels. In some cases a number of these tumors, of varying size but of the same character, will extend along the surface of the skin like deep varices. They are usually soft, especially when of large size, and have a peculiar lobulated feeling when pressed beneath the fingers.

In the treatment of nævus araneus and other telangiectases the electrolytic needle is most serviceable. Any form of galvanic battery may be used, and the point of an ordinary cambric needle or flexible steel jeweller's broach, attached to the negative cord, should be pressed into the centre of the red spot. A moist sponge attached to the positive cord should now be grasped in the patient's hand or slowly applied to the skin at any point, when the electrolytic current will begin to act and quickly produce a whitening of the skin around the needle



Fig. 33.-Nævus of scalp.

point and cause sufficient inflammation to seal up the deepseated supply vessel. The pain caused by this operation is slight and no more than the promise of some candy or a coveted toy will induce the average child to endure. The result is always excellent.

The electrolytic needle may also be used with success in many cases of port-wine mark, but the treatment is tedious and only capable of producing good results when persistently and skilfully employed. The best that can be said of it is that in

case of extensive and dark-hued patches it is superior to any other plan of treatment, even if it is not productive of the speedy and brilliant result which might be desired. The object of this method of treatment is to cover the dark-red skin with minute punctate cicatrices, which will at least lessen the conspicuous character of the mark, if it does not remove it entirely. To remove a red birthmark and leave a perfectly normal skin is an impossibility. In cases where the color is not



Fig. 34. -Nævus tuberosus.

very deep a good result may be obtained by dotting the surface with minute drops of nitric acid, great care being taken that these do not spread or run together and in this way produce ulceration and subsequent pitted or raised cicatrices.

In the tuberose variety of nævus, where red tumors suggestive of a strawberry, cherry, or flattened tomato are to be removed, a resulting cicatrix is unavoidable, and either acids, electrolysis, or the platinum cautery may be advantageously used. The size and disfiguring character of the scar which is

necessarily produced will depend in great measure, however, upon the skill and caution displayed in the treatment, whatever means may be employed in destroying the vascular growth. The attempt to remove this form of nævus by compression has always failed, in my experience; and as for ethylate of sodium,



Fig. 35.—Nævus of vulva.

although it has proved successful, it has been quite as painful and less effective than nitric acid.

In the treatment of the cavernous nævus the knife, ligature, galvano-cautery, and injections of carbolic acid and of iodine have been recommended, and the most suitable method of treatment must depend upon the nature of the case.





Lapus Vulgaris.

LUPUS AND OTHER TUBERCULIDES,

Many years ago the fact was noted by dermatological clinicians that lupus vulgaris was frequently associated with pul-



Fig. 36.-A group of tubercles.

monary phthisis, and recent microscopical research has demonstrated that in both affections the same bacillus may be found. Lupus vulgaris is therefore one of the clinical forms of cutane-

ous tuberculosis and may be properly described as a tuberculide. There are other affections of the skin which are commonly associated with the varied symptoms of scrofula and in which the bacillus tuberculosis may be found, but they are clinically distinct, though pathologically related to lupus. The term tubercular, as applied to lupus, was originally used only in a morphological sense, indicating the nodular character of the eruption. It is a singular fact that, while the old term is still



Fig. 37.—Tubercles forming a ring.

retained in use, science has invested it with a deeper and more definite significance since the discovery in the nodule of the tubercle bacillus.

Lupus vulgaris is an affection which is often seen in child-hood, and which, indeed, begins in most cases before the age of puberty. It usually appears in the form of one or more dull red papules upon the cheek or elsewhere. These slowly increase in number and tend to coalesce (Fig. 36). Frequently the older or central lesions disappear by interstitial absorption and an

irregular ring is formed (Fig. 37), or an infiltrated patch with one or two outlying nodules (see plate). Upon the neck the disease often assumes a serpiginous form, spreading at the margin and enclosing a cicatricial area, dotted, perhaps, by a few recently developed nodules (Fig. 38). This form of the disease may have a somewhat acute character, and, though spreading slowly, may increase in extent much more rapidly than does the nodular form seen upon the cheeks.

Upon the ala nasi, which is a frequent site of lupus, a scaly



Fig. 38.—Serpiginous lupus with central cicatrix.

or crusted patch is often seen, with more or less ulceration, and in time a marked deformity as the result of cicatricial contraction (Fig. 39).

The nodules of lupus, when well developed, have a characteristic translucent, jelly-like appearance, and, though feeling firm and resilient to the touch, are much softer than the normal cutaneous tissue. In an advanced stage the nodules and patches of lupus become somewhat scaly and not infrequently soften and ulcerate. In chronic cases seen in adult life the

disease is often found to have spread over the greater portion of the face, producing a marked ectropion and a partial disappearance of the nose and ears. Such an extensive development of the disease is rarely if ever observed in childhood. Although the face is the most common site of lupus, the trunk and extremities may also be affected, either independently or with the face.



Fig. 39.-A favorite site of lupus.

Another tuberculide, or affection in which the bacillus tuberculosis is invariably present, is often met with in childhood as well as in adult life, and is known as tuberculosis verrucosa or lupus verrucosus. This consists of dry, warty, or papillomatous patches (Fig. 40), which may develop upon the back of the hand, especially over the knuckles, the wrist, the popliteal spaces, and other portions of the body, and is commonly regarded as the result of local infection. The development of the disease is

slow. Ulceration rarely occurs, but the centre of the patch may undergo a spontaneous cure, leaving cicatricial tissue.

Still another form of cutaneous tuberculosis is that commonly described under the name of scrofuloderma. This appears in the form of suppurating or crusted ulcers of the skin in children who usually present other evidences of the scrofulous taint. It is most frequently observed upon the neck over



Fig. 40.—Lupus verrucosus (tuberculosis verrucosa cutis).

lymphatic glands which have undergone caseous degeneration and softening, although it may occur in multiple discoid lesions over the buttocks, thighs, and other portions of the body. When lupus or scrofuloderma attacks the hand or fingers of a child the bony tissue is frequently involved and a strumous dactylitis may develop, or caries with resulting atrophy and a considerable subsequent deformity (Fig. 41).

Lupus erythematosus, though allied in name to lupus vulgaris and often bearing a strong resemblance to it, cannot be considered as a tuberculide. The bacillus tuberculosis has not been found in this affection, and all attempts at inoculation of animals have given negative results. It may be remarked in passing that this disease, like lupus vulgaris, is most commonly seen upon the face (Fig. 42), but, unlike the common form of lupus, it is rarely seen in childhood.



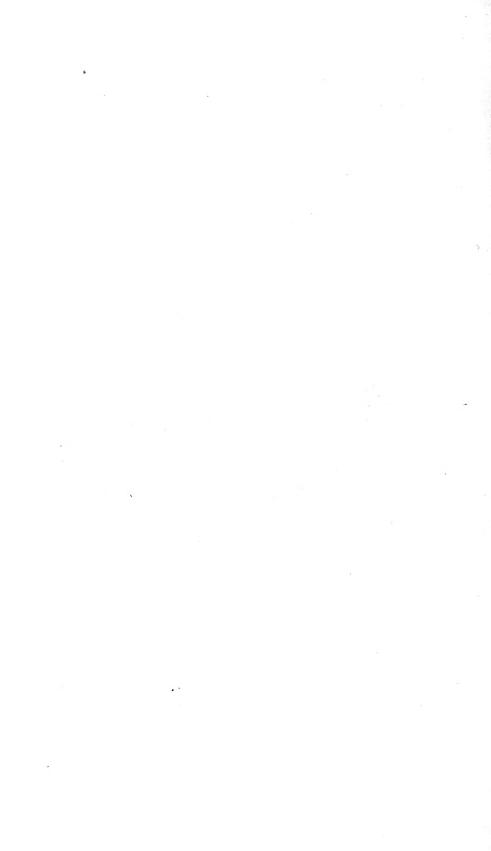
Fig. 41.—Ulcerating lupus with atrophy of bone.

In the treatment of lupus and the other tuberculides much may be done to improve the general health of the patient and thus to modify to a limited extent the spread of the disease; but to effect a cure a resort to surgical measures is necessary. The palliative treatment by means of ointments and plasters, so frequently employed, need only be mentioned for the sake of condemnation. The morbid tissue must be destroyed, and it matters little how this is done provided it is thoroughly done. The knife, the cautery, and caustic pastes I have used and discarded, believing that by the skilful use of the curette and burr the disease can be removed with the least amount of pain and discomfort and the least resulting disfigurement. For many years I have used the dental burr of varying size, dipped in carbolic acid, for the destruction of lupus nodules, and ever with increasing satisfaction. This instrument readily penetrates the



Fig. 42.-Lupus erythematosus.

gelatinous lesions, and when the handle is rolled between the fingers, and the burr pressed in various directions, it bores out the softened lupus tissue as it does the carious substance in a dental cavity and leaves the normal skin uninjured. In diffused patches of lupus, in scrofulous ulcerations, and in verrucous tuberculosis (after the warty surface has been removed by a salicylic-acid plaster) nothing can be more serviceable than the dermal curette.



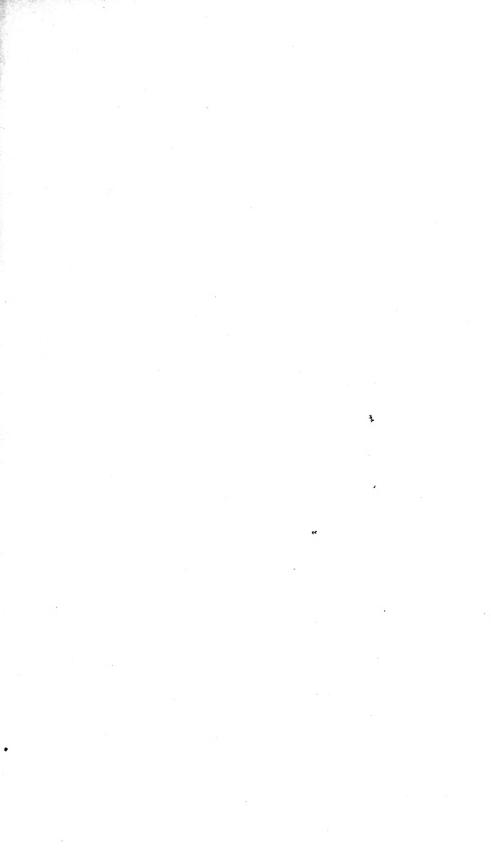


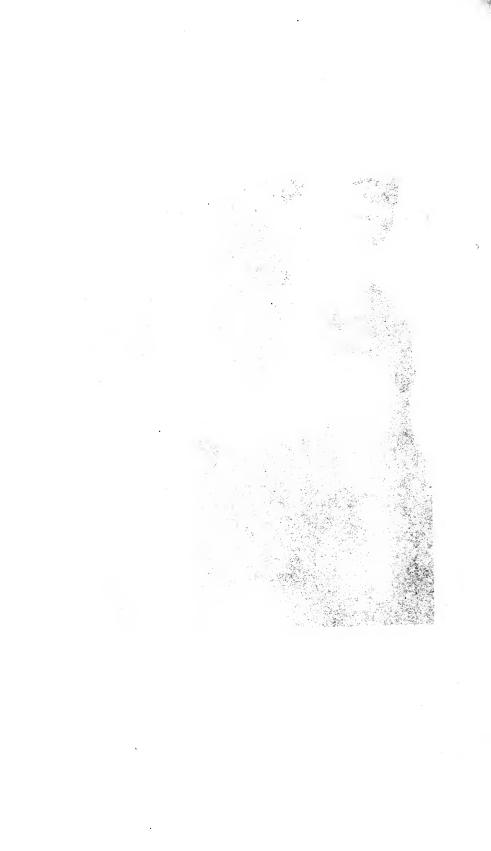
Plate XI



Lichen Ruber (Pityriasis rubra pilaris)

From the sellection of photographs of Dr. George Henry F





LICHEN RUBER AND LICHEN PLANUS.

LICHEN RUBER, or pityriasis rubra pilaris as it is called by many writers, is a rare disease, but one which is liable to affect children as well as adults. It is a chronic and obstinate disease, in which the lesions are small, reddish, acuminate papules,



Fig. 43.—Papular form of lichen ruber.

usually seated at the orifice of hair follicles. These do not increase in size, but by multiplying and coalescing produce patches covered by fine, whitish scales and characterized by an exaggeration of the natural furrows of the skin.

The eruption often undergoes a spontaneous improvement,

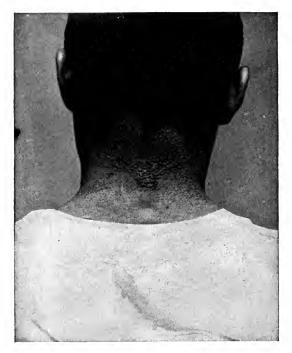


Fig. 44.—Papules on a favorite site.



Fig. 45.—Plantar lichen ruber resembling eczema.

but only to relapse, and, as a consequence of this, its clinical

appearance varies greatly at different times and often upon



Fig. 46 —Lichen ruber resembling ichthyosis.



 $$_{\rm Fig.~47.-Lichen}$$ ruber resembling psoriasis. various portions of the body. Three stages or clinical forms

of the eruption may be conveniently described as the papular, squamous, and rugous forms of the disease.

In the papular form of lichen ruber (Figs. 43 and 44) the lesions are small, usually acuminate, and often tipped with a minute white scale. When of recent development they produce an appearance quite similar to *cutis anserina* or follicular keratosis. Upon the dorsum of the fingers there is often noted a group of follicles plugged with blackened epidermic scales, while upon the palms and soles a scaly condition is usually pres-



Fig. 48.—Rugous form of lichen ruber.

ent, closely resembling a chronic squamous eczema (Fig. 45). The papules often increase rapidly in number upon certain portions of the body, become flattened and scaly as they coalesce, and now present an entirely different aspect.

In the squamous form of lichen ruber the eruption appears as white, scaly patches of varying size and form, and frequently bears a strong resemblance to ichthyosis (Fig. 46) or psoriasis (Fig. 47). The eruption in this stage shows a marked tendency to occur in elongated, spindle-shaped, or band-like patches.

At the margin of these squamous patches numerous isolated, white-tipped papular lesions may frequently be seen. The scalp is generally affected when the disease has existed for some time, and the face often presents an appearance suggestive of ichthyosis.

In the rugous form or stage of the disease the affected portions of skin present a dull-red, leathery appearance, with slight scaling and deep parallel furrows (see plate and Fig. 48). Upon the hands the skin sometimes becomes shrivelled and drawn to an extent which seriously interferes with the motion of the fingers (Fig. 49), while the nails show marked evidence of malnutrition. In some cases nodular ridges are found at the bend



Fig. 49.—Chronic form of disease.

of the elbow, upon the pubes, and elsewhere, and present a moniliform or bead-like appearance (Fig. 50).

Itching is commonly present, and often very severe and annoying in advanced cases, and an exacerbation of the eruption is frequently preceded by an intense burning sensation.

The prognosis in lichen ruber is an unfavorable one. Although the disease may yield to judicious treatment, and even improve spontaneously, a long series of relapses may be looked for, and a fatal termination be predicted in many cases. The reported cure of cases by French and German writers may be readily explained by their belief in the identity of lichen ruber and lichen planus.

From what has been said it is evident that the treatment of this disease must of necessity be palliative rather than curative. The improvement of the patient's general health by a hygienic and tonic regimen will usually accomplish more than the administration of arsenic or any other drug. Meanwhile the comfort of the patient can be greatly increased by baths and inunctions tending to soften the dry, harsh skin and to lessen the pruritus.

Lichen planus is a disease which is entirely distinct in nature



Fig. 50.-Moniliform lichen ruber.

from lichen ruber, although the two affections have been considered as clinical forms of the same disease by many European writers. This erroneous view has led to considerable confusion of dermatological literature. The typical lesions of lichen planus are small, flattened, angular papules with a shining surface and a minute central depression. Those of lichen ruber, on the other hand, are usually acuminate, although in rare cases they may appear flattened and smooth. The eruption in lichen planus commonly presents a purplish or lilac hue, which is very

characteristic and often serves as an excellent basis of diagnosis. The lesions are at first discrete, but show a marked tendency to coalesce and form irregular or reticulate patches of varying



Fig. 51.-Lichen planus.

size. The most common site of the eruption is upon the anterior aspect of the forearm and next upon the lower extremities. It is often seen around the waist and sometimes upon the



Fig. 52.-Lichen planus.

genitals. In exceptional cases the greater portion of the trunk may be affected, and such cases are very apt to be confounded with lichen ruber. Upon the legs the patches are frequently roughened and pigmented, and present an appearance quite unlike the eruption seen upon the trunk and forearms.

Lichen planus runs a variable course, some cases disappearing spontaneously and often unexpectedly after an existence of a month or two, while others will sometimes persist for many months in spite of the most approved method of treatment. The itching is often very annoying to the patient, but the general health is usually unimpaired, and, unlike lichen ruber, the disease never terminates fatally.

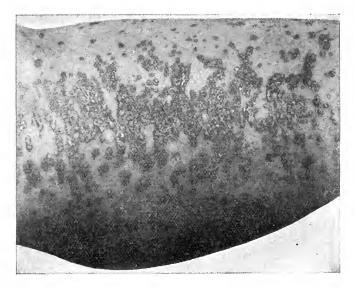


Fig. 53.-Lichen planus.

In the treatment of lichen planus arsenic is often of service, but in this, as in many other affections, it may do harm as well as good; and when there is much irritability of the skin alkaline remedies will be found to be of much greater service. Of the various local remedies which have been highly recommended no one seems to have any special value in all cases. A mild carbolic or salicylic acid lotion may be advantageously used in acute cases, and the same increased in strength when the patches have assumed a chronic character.

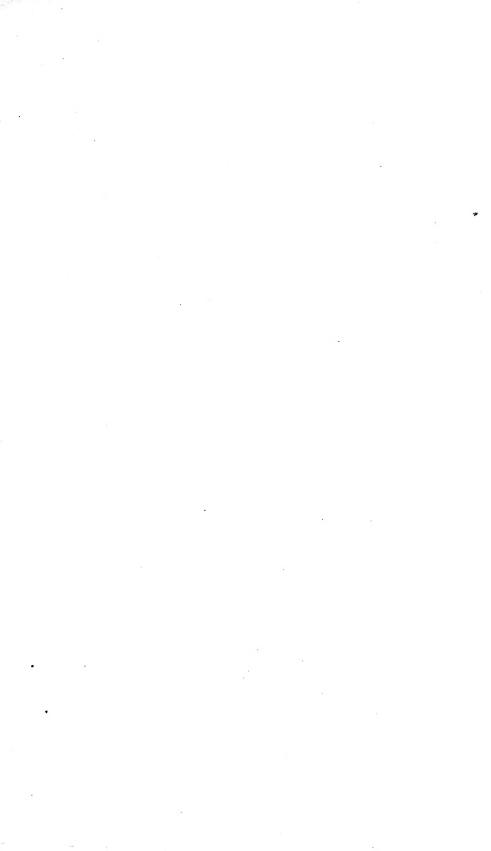


Plate XII



STATIS HEREUMTARIA

The State of the place years

De George Henry Jes

VARIOUS SKIN DISEASES OF CHILDREN,

Syphilis hereditaria.—When syphilis is transmitted from one generation to another it may result in the death of the feetus in utero, or in the development of an infantile eruption which either is present at birth or appears shortly after. In most cases it manifests itself within three months, and always during the first year. The eruption may be erythematous and appear as a general roseola, similar to the earliest eruption of acquired syphilis, or in the form of dull-red patches on the trunk and upon the palms and soles, which present a dry, scaly appearance quite characteristic of the inherited disease. the mouth the skin is often dry and fissured, and on the buttocks the patches are apt to become raw and even ulcerated at various points. In some cases the eruption assumes a papular character (see plate), and numerous yellowish-red and slightly scaly discs are seen upon the buttocks, thighs, and face, and occasionally over the greater portion of the body. instances the papules are small, flattened, and shining, and present a strong resemblance to lichen planus. Pustular lesions of an ecthymatous character are sometimes present, especially in infants who are ill-nourished and poorly cared for. Bullous lesions are not infrequently seen upon the palms and soles and other portions of the body, and in fact are much more common than in the acquired disease of adult life.

In connection with these early cutaneous manifestations a notable condition of malnutrition is usually observed, and certain characteristic symptoms resulting from affection of the mucous membranes and the osseous structures. The nasal passages are often inflamed and obstructed by an accumulation of mucus. The larynx may be affected, giving rise to a peculiar hoarse cry.

The prevention of hereditary syphilis is more important than

its treatment, and the physician is often in a position to advise against the premature marriage of syphilitic patients, and thus prevent an amount of misery and suffering which he could never cure.

In the treatment of infantile syphilis a half-grain or more of mercury with chalk may be administered three times a day, and a speedy improvement expected if the child is properly cared for. When irritability of the stomach and intestines is present it is advisable to adopt the plan of mercurial inunctions. A mass of mercurial ointment, the size of a small marble, should be spread upon a piece of flannel and bound around the trunk or thighs, its position changed from day to day to prevent excessive irritation of the skin.

In treating mucous tubercles and superficial ulceration upon the buttocks and about the genitals, calomel powder mixed with three to five parts of starch may be sprinkled over the raw surface, care being taken to keep the affected parts dry and clean. The importance of fresh air and nutritious food must never be forgotten, and when the symptoms of the disease have abated the syrup of iodide of iron, and perhaps cod-liver oil, may usually be given with great benefit.

Erythema nodosum is one of the forms of erythema multiforme, though commonly described in dermatological text books as a distinct disease. It occurs most frequently in childhood, and the female sex seems especially prone to suffer from it.

The lesions in this affection are red, painful swellings, looking very much like recent contusions, and are most frequently seen over the tibiæ. They are usually associated with slight fever, considerable malaise, and in some cases with articular pains. Both legs are commonly affected, and rarely are the lesions found elsewhere. In some cases, however, the lesions are numerous and found upon the thighs as well as the legs (Fig. 54), and in rare instances the forearms may be affected. The lesions are at first of a bright-red hue, but soon become dull red or purplish, and usually disappear in a week or two. New lesions sometimes continue to appear and prolong the duration of the disease. The individual nodules usually last from eight to fourteen days. New nodules appear, as a rule, during the first two weeks, and the disease may therefore last from three to six weeks. In exceptional cases it may continue for months.

The cause of erythema nodosum is obscure. Most patients appear to be in poor condition, and a rheumatic tendency is

sometimes noted. An examination of the blood will sometimes reveal the presence of malarial organisms.

The eruption always tends to a spontaneous recovery and usually shows no disposition to recur. While no medicinal treatment is absolutely necessary, a saline laxative at the outset will often do some good, and may be followed by the administration of salicylate of soda.

Locally a lead-and-opium wash, or a lotion of zinc oxide in lime water, will tend to allay the burning pain or tenderness of



Fig. 54.—Erythema nodosum.

the lesions, which is often a distressing symptom, and rest in bed for a few days is desirable during the height of the attack.

Purpura, or idiopathic hemorrhage into the cutaneous tissues, results from many causes and occurs in connection with various diseases. It is usually characterized by small petechial or larger guttate spots, which are at first of a bright claret hue, but which rapidly assume a dull-purplish color. The eruption is readily distinguishable from an erythema or any inflammatory exanthem, since the redness does not disappear under firm pressure of the finger.

In purpura simplex the lesions are commonly symmetrical and seen upon the legs, but in children more frequently than in adults the eruption may appear upon the thighs (Fig. 55) and other portions of the body. In a child suffering from whooping cough I have seen the chest dotted with petechial spots. When the hemorrhage takes place in or around a hair follicle the lesions are apt to be elevated, and to this condition the term purpura papulosa has been applied.

In mild cases of purpura simplex the lesions usually appear suddenly without other symptoms, and gradually fade away



Fig. 55.—Purpura.

in one or two weeks, unless a fresh outbreak occurs. In this event the bright-red color of the recent spots contrasts strongly with the dull livid hue of the older lesions.

In severe cases of purpura the eruption may be very abundant, and with the cutaneous lesions hemorrhage from various mucous surfaces may occur. The gums are usually swollen and bleed easily. Epistaxis is frequent and blood is often noted in the stools and urine. This form of the disease is called purpura hemorrhagica. It is characterized by marked

constitutional symptoms, and the weakness resulting from a continued loss of blood sometimes leads to a fatal termination.

Another form of the disease is associated with severe arthritic pains and the appearance of elevated purpuric lesions, especially in the vicinity of the affected joints. This is termed purpura or peliosis rheumatica. This affection usually runs a brief course, although a repeated onset of fever and rheumatic pains, followed by cutaneous hemorrhages, may protract it for months. It commonly attacks those who have a rheumatic tendency but are otherwise apparently well.

There is little difficulty in the diagnosis of purpura, as the color of the lesions is characteristic and their hemorrhagic nature can be readily demonstrated by the pressure of the finger. It is well to remember, however, that cutaneous hemorrhage is not infrequently an accompaniment of the eruption in severe cases of the common exanthemata.

In the treatment of mild cases of purpura, rest in bed, with a nutritious diet and administration of the tinctura ferri chloridi, is generally followed by a prompt recovery. In severe cases, especially of the hemorrhagic type, iron, turpentine, and ergot are commonly employed with good effect. Ergot may be given by the mouth or by hypodermatic injection. For the latter purpose a grain of ergotin may be dissolved in warm water and glycerin, and injected with such frequency as the exigencies of the case may demand.

Molluscum is a term which has been applied to two distinct affections having no pathological relation to one another. One is the molluscum fibrosum of older writers, which is now commonly designated as fibroma. The other is the molluscum contagiosum, which was first described by the English dermatologist Bateman early in this century. The latter is a somewhat rare affection of the skin, but of much more frequent occurrence in childhood than in adult life. It consists of one or more small, flattened whitish tumors, varying in size from a pin's head at the outset to a split pea when fully developed. These little growths are sometimes pedunculated and usually present a central depression, from which a whitish substance can be readily This looks like ordinary sebaceous matter, but under the microscope is found to contain certain oval corpuscles which are a characteristic of the disease.

The tumors are commonly seen upon the face and neck, but may occur on various portions of the body. They are usually multiple, sometimes numerous, and, though unsightly, are never the source of any particular discomfort. They develop slowly and last indefinitely. Each begins as a minute elevation of a whitish color, and gradually the flattened summit and umbilication develops. When of full size the walls are sometimes traversed by fine blood vessels which give the tumor a pinkish appearance.

The disease is often called molluscum contagiosum, and, though its contagious character is not always apparent, it has



Fig. 56.-Molluscum.

been known to affect several in a family or in a ward of a children's hospital, and attempts at artificial inoculation have sometimes been successful. It is doubtless of microbic origin, but the conditions favoring its development are as yet obscure. It is especially liable to affect children of a poorer class, and hence is much more common in dispensary than in private practice. Damp and crowded dwellings seem to favor its development, and in dispensary practice I have known a number of

cases to originate in the same locality. Children suffering from molluscum are especially prone to have warts upon the hands.

The diagnosis of molluscum is usually made with ease by any one at all familiar with the appearance of the tumors. Large milia upon the face might be mistaken for them; but these tumors are rounded, of much firmer consistence, not likely to occur in groups, and always lack the characteristic flattened surface and central umbilication.

The treatment of molluscum is simple and effective. Many of the tumors, after a duration of a few weeks or months, undergo a process of destructive inflammation, and a spontaneous cure results. This is especially apt to be the case when two are close together and coalesce as they increase in size. If a tumor is vigorously compressed and the contents evacuated it will usually disappear. Incision and cauterization, or abscission by means of a sharp knife, have been recommended, but the simplest method of removing the tumors is to scrape them quickly with a curette and to lightly touch the bleeding surface with nitrate of silver. The main object in treating these tumors is to destroy them completely and to excite as little inflammation as possible in so doing. When even a large molluscum is removed by means of the curette no scar or trace of the growth is usually left, since the tumor is an outgrowth of the epidermis and does not involve the true skin. an inflamed molluscum is scratched or irritated to the extent of inducing a purulent secretion, a slight pit may be expected to result.

Keratosis follicularis is an affection not infrequently seen in childhood, especially among children who are poorly cared It is the result of an abnormally dry condition of the skin and the accumulation of epidermic scales in the hair follicles. This produces an eruption of small, conical papules, which are commonly found upon the outer aspect of the extremities. These are usually of the color of the skin. Sometimes they are discolored by dirt, and in some cases they become inflamed and present a dull-red hue. The fine hairs growing upon the affected skin are often broken off or coiled up in the follicles. When the disease is severe and of several years' duration the skin has an ichthyotic appearance and to the touch feels like a nutmeg grater. The disease is described in some text books under the name of lichen pilaris or keratosis pilaris, but the follicle is primarily involved and not the hair. Recently the term keratosis follicularis has been applied by some writers to an entirely different and extremely rare disease described by Darier.

The treatment of the disease is mainly palliative, as in many cases time alone will effect a complete cure. The daily inunction of the skin with some fat or oil, and the frequent resort to hot baths and vigorous soap frictions, will be productive of much benefit and often restore the skin to its normal condition.



Fig. 57.—Keratosis follicularis.

But this treatment must be continued for some time to prevent a return of the disease. A Turkish bath once or twice a week will prove of service.

Keloid is a dense fibrous tumor of the skin, which in certain individuals is liable to develop upon the site of a cut, burn, or other injury. A distinction has often been made between true and false keloid, many writers claiming that the former develops spontaneously while the latter is always an outgrowth upon

a scar. This distinction, however, is of little value, since the growth is the same in either case, and it is impossible to assert, in any case of spontaneous keloid, that it has not been preceded by some prick or slight injury to the skin. A distinction, however, may be justly drawn between keloid and a hypertrophic cicatrix. Many scars, especially those following burns, are prone to pucker and bulge until a tumor is formed which looks very much like keloid, being rounded, smooth, reddened, and often very firm and even painful. But while keloid is characterized by a marked tendency to enlarge its area by the forma-



Fig. 58.—Keloid.

tion of claw-like processes suggestive of a crab, and to persist indefinitely, the hypertrophic cicatrix never extends beyond the limits of the scar tissue and tends to a gradual disappearance rather than to an increase in size.

Keloid is usually single, but many tumors may be present, and in some cases these attain considerable size. The growth is commonly painful when squeezed or pressed, and sometimes a continuous burning or pricking sensation is experienced. A spontaneous disappearance of the tumors has been reported, but this is exceptional. Keloid occurs at all ages, affects various

portions of the body in both sexes, and is especially common in The tumors increase in size for a certain time the negro race. and then often remain stationary for years. A characteristic peculiarity is their tendency to return quickly whenever excised. A spontaneous disappearance of keloid is more likely to occur in childhood than in adult life, and tumors developing upon large scars are more likely to disappear than those which seemingly spring from the normal skin. A favorite site of keloid is the sternal region, where it often appears in adults as an elongated flattened tumor crossing the median line in a transverse Its frequent occurrence in this locality has been atdirection. tributed to the common custom of applying blisters to this part for the relief of acute pulmonary affections. It also is seen frequently upon the scalp, face, neck, and trunk.

The treatment of keloid is usually discouraging. as has been remarked, is usually followed by a return of the growth. Good results have been obtained by deep linear scarification and the application of glacial acetic acid to the cuts, and also by the use of the electrolytic needle. Subcutaneous injections of thiosinamine have been recommended, and in hypertrophic cicatrica I have known this to be followed by The results from the subcutaneous use of this drug in lupus, psoriasis, and certain other skin diseases have not proved to be as beneficial as its enthusiastic advocates of a few years since were disposed to claim. But in the relief of corneal opacities and cicatricial contractions it has apparently proved of Whether its use in true keloid will effect even a notable improvement remains to be demonstrated; but in cases of scar keloid which are tending to recovery it might, at least, be tried in connection with the fatty inunctions and frequent massage which seem to do some good and certainly do no harm.

Scabies is a disease which in this country has notably increased in frequency during recent years. In most cases it is readily recognized by the characteristic location of the excoriated papules which mainly constitute the eruption. The disease, as is well known, is due to the burrowing of the acarus or itch-mite in the soft skin between the fingers and elsewhere, and is usually communicated by sleeping with, or in a bed which has been occupied by, a person affected with the disease. The mature, impregnated female alone makes the burrow in which the eggs are deposited, and dies after performing this function. In recent cases the burrows or cuniculi in which the female acarus has deposited her eggs may be found upon the web of the

fingers, the anterior portion of the wrist, the axillæ, genitals, and ankles, and appear as small, curving dotted lines, from the extremity of which the insect may sometimes be dug out with the point of a needle. These burrows are often concealed by an eruption of vesicles, pustules, and crusted sores, and not infrequently the lesions of contagious impetigo are present. Upon other portions of the body the eruption usually consists of numerous excoriated papules covered by minute blood crusts. The anterior aspect of the forearms and the abdomen are especially apt to be the seat of the eruption, but when the disease has existed for several months the eruption may cover the



Fig. 59. - Scabies.

whole body, with the exception of the face, which always remains unaffected, except in the case of infants and very young children. The location of the eruption in this disease depends to a great extent upon the character of the clothing which the patient wears, and differs in the case of men, women, and children. The excoriations about the breasts of women and upon the genitals of men and boys are due to the ease with which these parts can be scratched at night, while in young children who wear long, close-fitting night-dresses the wrists and ankles are most likely to be the seat of the eruption.

The treatment of scabies is simple and effective. For gene-

rations sulphur ointment has been a standard remedy, and nothing else is needed, although many other remedies and combinations have been recommended. A warm bath should first be taken to soften the skin, and soap used vigorously to remove the dead epidermis covering the cuniculi. The sulphur ointment should now be rubbed gently into the affected skin, especially in those regions where the acarus is apt to burrow,



Fig. 60.—Pustules in scabies.

and this inunction repeated, without bathing, for about five successive nights. Under this treatment the itching is abated and the disease usually cured. In severe cases it may be necessary at the end of five days to repeat the bath and the subsequent inunctions. In infants and young children, or in patients with a very delicate skin, it is advisable to dilute the sulphur ointment with one or two parts of vaseline or cold cream.

FORMULARY.

Note.—In the following formulary the decimal system has been employed, and the percentage of each ingredient can therefore be readily seen at a glance. The unit may be regarded as a grain, a gramme, or any other weight, without changing the relative amount of the ingredients. An exception to this rule will be found in the baths recommended for syphilis, in which definite amounts are given in both the metric and the apothecaries' systems. The formulæ have been carefully selected from the writings of various well-known authorities, and some trifling changes have been made in a few cases in order to reproduce the prescriptions in a decimal form or to render them more suitable for use in childhood. The signs B, M., and S. have been omitted to avoid repetition. As far as possible an attempt has been made to give due credit to the author of each formula.

ACNE.

1.
Glycerini
Alcoholis
Aquæ destillatæq. s. ad 100.
To be used as a lotion.
(Liveing.)
2.
Ichthyolis
Alcoholis. 50 Ætheris. q. s. ad 100.
Attletisq. s. au 100.
3.
Spiritus lavandulæ 3
Saponis mollis 6
Tincturæ hamamelidis
Alcoholisq. s. ad 100.
Use to stimulate indurated spots.

4.

Acidi borici	 	 	 	 		 			3
Aquæ hamamelidis	 		 	 	٠.	 ٠.			40
Aquæ rosæ fortioris	 	 	 	 		 .q.	s.	ad 1	.00

To be used in acne punctata.

(Shoemaker.)

5.

Iodi	25
Potassii iodidi	25
Glycerini	100.

Paint the surface with a brush twice daily for from three to six days. When the crust is cast off apply a simple ointment or powder. This is to be used in severe indurated cases only.

6.

Tincturæ benzoini		2
Glycerini		3
Zinci oxidi		10
Unguenti aquæ rosæ	q. s.	ad 100.

7.

Thymolis			1
Oleati zinci	•		6
Sulphuris sublimati			12
Adipis lanæ hydrosiq.	s.	ad 1	00.

8.

Europheni	3
Unguenti zinci oxidiq. s. ad 100	

9.

Naphtolis	2
Sulphuris sublimati	4
Unguenti)_

(Kaposi.)

FORMULARY.

10.

Hydrastininæ hydrochloratis	1
Zinci carbonatis	10
Unguenti zinci oxidiq. s. ad 10	00.

ALOPECIA AREATA.

1.

Acidi salicylici	3
Sulphuris præcipitati	
Petrolati mollis	
Adipisq. s. ad 10	0.

Apply at night. Shampoo the head the next morning with a salicylated soap and apply friction with a soft brush, wet with the following:—

Hydrargyri chloridi corrosivi 1
Spiritus rosmarini
Alcoholis
Once a week the patches may be painted with:—
Spiritus gaultheriæ

(Feulard.)

2.

Ætheris......q. s. ad 100.

Acidi tannici	2
Olei ricini	50
Olei thymiq.	. s.
Alcoholis absoluti	

To be used as a head wash every evening. Once a week substitute the following:—

Acidi salicylici	
Acidi acetici glacialis	j
Olei geranii q. s.	
Olei riciniq. s. ad 100.	

In addition to the above the head is to be washed once a week with soft soap.

(Rochon.)

	3.
	Tincturæ benzoini. Acidi salicylici. Alcoholis
\mathbf{Appl}	y once or twice daily.
	(Kaposi.)
	4.
	Olei cinnamomi
	5.
	Spiritus ammoniæ
	(Shoemaker.)
	6. Tincturæ capsici
	7.
	Tincturæ cantharidis 10 Tincturæ capsici 10 Olei ricini 10 Alcoholis diluti q. s. ad 100 (Ashby & Wright.)
	8.
	Acidi acetici 10 Olei ricini 50 Alcoholis q. s. ad 100
	9.
	Acidi acetici glacialis. 9 Chloralis. 4 Ætheris q. s. ad 100.
	(Gaucher)

FORMULARY.

10.

Quininæ. 1 Acidi tannici 2 Olei resedæ. q. s. Olei aurantii florum. q. s. Unguenti aquæ rosæ q. s. ad 100. To be used occasionally if hair is dry.
44
11. Tincturæ benzoini. 2 Hydrargyri ammoniati 5 Olei rosæ q. s. Unguenti aquæ rosæ q. s. ad 100.
Pomade. To be used if hair is very dry.
(Kaposi.)
12. Chrysarobini
For dispensary practice.
13. Acidi salicylici
For dispensary practice.
(Unna.)
BITES AND STINGS OF INSECTS.
1.
Ammonii chloridi. 10 Alcoholis. 10 Aquæ. .q. s. ad 100.
2.
Hydrargyri chloridi corrosivi

3.
Naphtolis
4.
Potassii permanganatis
5.
Aquæ hydrogenii dioxidiq. s.
For local application.
6.
Aquæ ammoniæ fortiorisq. s.
Apply locally.
7.
Acidi borici

BURNS.

1.

ANTISEPTIC CAGE TREATMENT.

A cradle or raised surface is placed so that an antiseptic dressing covers the wound but does not come in contact with it. The wound is dressed by lifting the dressing and washing the surface with a weak antiseptic solution.

(Benson,)

2.

LONDON HOSPITAL TREATMENT.

A severely burned child is immediately wrapped in a blanket, without having its clothes removed. The bed is placed near a fire; hot-water bottles are applied; brandy and the tincture of opium are given. As the patient reacts, one part after another

is dressed with zinc ointment and covered with cotton. After the dressing the part is recovered with a blanket. Suppuration commences in about four days, and the parts are then redressed. It is at this period that diarrhea is to be feared and should be treated at its inception. Never give aperients, but use enemata if constipation arises. In the interim, before the suppuration has commenced, the child is given two to three minims of the tincture of opium every four hours and one-half drachm of brandy every hour. The rule of never waking a child for its medicine is sufficient safeguard against an overdose. For a child two or three years old the first dose of the tincture should not be less than four or five minims, with two drachms of brandy, to be followed by three minims, if the child is crying, at the end of one hour.

(Fenwick & Barnard.)

3.

WATER-BED TREATMENT.

The patient is kept continually in Hebra's water-bed at a temperature agreeable to himself, and the wounds are treated surgically. The water is to be renewed two or three times a day. This bath can be imitated in private practice with a long bath tub, horsehair pillows, and blankets.

(Hebra.)

4.

TREATMENT OF POWDER BURNS.

Suppuration occurs in a few days. Apply wet compress for one-half of an hour or longer. A sharp razor is then passed over the surface, which cuts off the soft elevations containing the powder. Wash off with a stiff sponge moistened in a weak antiseptic solution. Clean and rewash until all coloring matter is removed.

(Coombs.)

5.

Potassii nitratis.....q. s.

Add a few teaspoonfuls to a basinful of water. The part affected should be bathed for from two to three hours. If preferred, compresses thoroughly wet with a saturated solution may be applied. The analgesic effect produced is due to the refrigerant action of the salt. If the pain returns when the temperature of the water is raised, more of the potash should be added or the compresses renewed.

(Poggi.)

6.

Apply on compresses thoroughly wet with the solution. A window may be cut in the dressing through which the part may be kept constantly moist.

(Keen.)

7.

Bismuthi subnitratis......q. s. Aquæ fervidæ.....q. s.

Mix to the consistency of a paste. Apply with a soft brush over the affected area. The bullæ in burns of the second degree are drained with antiseptic silk, and the raised epidermis is allowed to remain in situ. The original covering is added to from time to time, as it cracks or falls off, but no other dressing is used. Magnesia may be used in the same way.

(Osthoff.)

8.

Ichthyolis	6
Zinci oxidi 8	30
Cretæ præparatæq. s. ad 100	0.

Apply once daily.

(Leistikow.)

FORMULARY.

9.

Acidi picrici 3	
Aquæq. s. ad 200.	

Immerse the affected part for five minutes and wrap in cotton, protecting it, if excoriated, with iodoform gauze. The stain can be removed with a solution of boric acid.

	(Thierry.)
]	10. Fincturæ opii 6 Liquoris plumbi subacetatis 6 Aquæ hamamelidis 12 Aquæ
	11. Sodii bicarbonatis
Z () () ()	12. Ichthyolis. 5 Zinci oxidi 10 Zretæ præparatæ 20 Amyli 20 Liquoris calcis. 20 Dlei lini q. s. ad 100. y once daily. (Leistikow.)
S F	13. Aristolis

Do not apply until secretion ceases.

(Haas.)

14.

Cocainæ
Sodii bicarbonatis 5
Adipis lanæ hydrosi
Olei olivæq. s. ad 100.
(Shoemaker.)
15.
Argenti nitratis

Nitrate of silver stick or this solution may be used to cauterize the exuberant granulations. The surface must first be moistened with a two per cent solution of cocaine.

Aquæ destillatæ.....q. s. ad 100.

CHILBLAINS.

1.

Argenti nitratis	5
Aquæq. s. ad 1	.00

Use when itching is severe.

2.

Calcii chloridi	3
Aquæq. s. ad 100	

Use when itching is severe.

(Jacobi.)

3.

Talei	8
Resorcini	15
Mucilaginis acaciæ	40
Aquæq. s. ad 10	00.

Paint the surface.

(Boeck.)

Potassii iodidi..... Glycerini......q. s. ad 100. Paint the surface. 5. Olei ricini..... Collodii......q. s. ad 100. Paint the surface. 6. Unguenti aquæ rosæ......q. s. ad 100. (Kaposi.) 7. Adipis lanæ hydrosiq. s. ad 100. For older children. (Hermane.) 8. Adipis lanæ hydrosi...... q. s. ad 100. Rub in with a piece of flannel. (Ashby & Wright.) DERMATITIS GANGRÆNOSA. 1. Hydrargyri chloridi corrosivi...... 1 Aquæ.....q. s. ad 500. 2. Chloralis..... 1 Aquæ.....g s. ad 100.

DERMATITIS EXFOLIATIVA NEONATORUM.

(Gaucher.)

Hygienic measures, breast milk, and tonics constitute the general treatment. Protect the desquamating surface with cotton and by the application of oils and fats. An incubator should be used, if possible.

(Ballantyne.)

ACUTE ECZEMA.

Iridis	5
Zinci oxidi	5
Alumini 2	90
Amyli	0

2.

Plumbi carbonatis		 	 	 		 								10
Zinci oxidi		 		 										20
Bismuthi subnitratis		 		 		 								20
Talci	. . .	 	 	 		 								20
Amyli		 ί.	 		 		 		q.	s.	8	ad	. 1	00.

Apply with a powder puff to the exposed parts of the skin, and to the intertriginous folds on pledgets of cotton thickly covered with powder. Change the pledgets as soon as they become warm and moist.

(Kaposi.)

3.

Zinci carbonatis	25
Plumbi carbonatis	25
Sulphuris sublimati	25
Marantæ pulveris	00.

4.

Δmyli	30
Plumbi carbonatis	
Lycopodiiq. s, ad 10	00.

5.

Acidi tannici	1
Bismuthi subnitratis	8
Aquæ rosæ fortiorisq. s. ad 200	0.

(Shoemaker.)

6.

Plumbi acetatis	1
Alumini	5
Aquæ destillatæq. s. ad 10	0.

Dilute five times with water and apply on compresses.

7.

Acidi carbolici	1
Spiritus lavandulæ	20
Spiritus odorati	30
Alcoholisq. s. ad 200	

Apply to the surface in case the pruritus is very severe. Follow immediately by the application of an inert powder. If there is not the slightest particle of moisture, tinctura rusci acts better. Apply in a very thin layer and follow with powder.

(Kaposi.)

8.

Zinci oxidi	10
Glycerini	20
Gelatini	25
Aquæ destillatæq. s. ad 10	00.

Cut off the quantity desired. Melt in a warm-water bath and apply with a brush. Only to be used when no moisture is present.

(Kaposi.)

9.

Naphtolis	1
Camphoræ	1
Cocainæ hydrochloratis	1
Zinci carbonatis	6
Unguenti aquæ rosæq. s. ad 10	00.

Use in acute infantile eczema.

10.

Creolini	2
Acidi borici	10
Zinci carbonatis	
Marantæ	90
Adipis lanæ hydrosiq. s. ad 10	0.

Use in acute infantile eczema.

(Shoemaker.)

11.

Petrolati mollisq. s. ad 100.
Use in the squamous stage.
12.
Zinci oxidi 20 Amyli 20 Adipis q. s. ad 100.
Use in the squamous stage.
13.
Hydrargyri ammoniati
Use in the squamous stage.
14.
Acidi tannici
Use in the squamous stage if disease threatens to become chronic.
15.
Olei cadini
Use in the squamous stage if disease threatens to become chronic.
16.
Acidi salicylici 2 Amyli 8 Zinci oxidi 10 Adipis lanæ hydrosi 15 Petrolati mollis q. s. ad 150
Use in the squamous stage if disease threatens to become
chronic. (Gaucher.)

CHRONIC ECZEMA.

1.

child

Liquoris potassii arsenitis. 3 Syrupi aurantii florum. 25 Olei morrhuæ. 50 Mucilaginis. q. s. Aquæ. q. s. ad 100.
One teaspoonful three times a day, after meals, for a childless than one year old.
$(Ashby \ \& \ Wright.)$
2.
Syrupi ferri iodidi
One-half teaspoonful to two teaspoonfuls three times a day.
(Shoe maker.)
3.
Plumbi acetatis
Apply as a lotion.
4.
Alumini
Apply as a lotion.
5.
Argenti nitratis
Apply as a lotion.
6.
Acidi tannici 4 Glycerini 50 Aquæ q. s. ad 100.
Apply as a lotion.

Chloralis	7.
Sample S	Glycerini
Solution Solution	
Unguenti cum styrace	(Gaucher.)
Zinci oxidi	Unguenti cum styrace
Adipis lanæ hydrosi	9.
with soft cotton compresses thickly spread with the ointment. He is held in bed by broad straps drawn across his legs, abdomen, chest, and shoulders, thus binding his arms to his side and keeping his legs in extension. Soft, heavily padded sand bags are placed one on either side of the head, to prevent any movement and consequent irritation. A nurse is in continual attendance at first, and soothing drugs may be given if necessary. (Rotch.) 10. Cretæ præparatæ	
10.	with soft cotton compresses thickly spread with the ointment. He is held in bed by broad straps drawn across his legs, abdomen, chest, and shoulders, thus binding his arms to his side and keeping his legs in extension. Soft, heavily padded sand bags are placed one on either side of the head, to prevent any movement and consequent irritation. A nurse is in continual attendance at first, and soothing drugs may be given if neces-
Cretæ præparatæ. 3 Sulphuris sublimati 15 Olei fagi 15 Saponis mollis. 30 Adipis. q. s. ad 100. Apply thinly with a brush. (Hebra.) 11. Olei rusci 1 Zinci oxidi 5 Petrolati mollis 50 Adipis lanæ hydrosi q. s. ad 100.	
Cretæ præparatæ. 3 Sulphuris sublimati 15 Olei fagi 15 Saponis mollis. 30 Adipis. q. s. ad 100. Apply thinly with a brush. (Hebra.) 11. Olei rusci 1 Zinci oxidi 5 Petrolati mollis 50 Adipis lanæ hydrosi q. s. ad 100.	
Sulphuris sublimati 15 Olei fagi 15 Saponis mollis 30 Adipis q. s. ad 100. Apply thinly with a brush. (Hebra.) 11. Olei rusci 1 Zinci oxidi 5 Petrolati mollis 50 Adipis lanæ hydrosi q. s. ad 100.	· 10.
(Hebra.) 11. Olei rusci 1 Zinci oxidi 5 Petrolati mollis 50 Adipis lanæ hydrosi q. s. ad 100.	Sulphuris sublimati 15 Olei fagi 15 Saponis mollis 30 Adipis q. s. ad 100
11. Olei rusci 1 Zinci oxidi 5 Petrolati mollis 50 Adipis lanæ hydrosi q. s. ad 100.	
Olei rusci 1 Zinci oxidi 5 Petrolati mollis 50 Adipis lanæ hydrosi q. s. ad 100.	(Hebra.)
	Olei rusci 1 Zinci oxidi 5 Petrolati mollis 50 Adipis lanæ hydrosi q. s. ad 100.

12.
Hydrargyri ammoniati
(Saalfeld.)
18.
Olei cadini 25 Petrolati mollis 25 Adipis lanæ hydrosi q. s. ad 100
The oil of cade should be pure and made from the wood. The coal-tar product is much inferior in its effect.
14.
Ichthyolis
15.
Naphtolis
To be used with great care in treating very young children.
16.
Acidi borici
Hydrargyri ammoniati
Use in eczema impetigo.
17.
Hydrargyri oxidi flavi
Use in eczema impetigo.

(Gaucher.)

ECZEMA ANI.

1. Chloralis
2. Acidi tannici
3. Extracti krameriæ
4. Mentholis
5. Cocainæ hydrochloratis
ECZEMA AURIUM.
Sodii carbonatis
Zinci sulphatis
Warm and pour into the external auditory meatus, using from ten to fifteen drops daily.

3. Argenti nitratis...... 1

Aquæ destillatæq. s. ad 100.

Paint the surfaces with a brush. Cease the application if

raint the surfaces with a brush. Cease the application if
any pain arises.
(Gruber.)
4.
Unguenti diachyli
Petrolati mollis
Apply on cloths.
5.
Glycerini 10
Olei fagi
Unguenti aquæ rosæq. s. ad 100.
Apply in chronic cases when the epidermis is thickened.
•
(Politzer.)
6.
Creolini
Aristolis4
Unguenti hydrargyri nitratis
Unguenti zinci oxidiq. s. ad 100.
(Shoemaker.)
ECZEMA CAPITIS.
EOZEMA OAITIB.
1.
Naphtolis 1
Naphtolis
Use to soften the crusts.
(Kaposi.)
2.
Acidi salicylici 1 Olei morrhuæ q. s. ad 100.
Apply locally to soften the crusts. Wash off the softened
masses every day or every other day with the liniment of
soft soap.
(Baginsky.)
(Dag vicings)

3.

Acidi carbolici	
Balsami Peruviani	
Olei olivæq. s. ad 100.	

Use to soften the crusts. If the inflammation is severe cold douches or compresses may be used.

Kaposi.)

4.

Zinci oxidi	5
Petrolati mollis	50
Adipis lanæ hydrosiq. s. ad 10	00.

Allow to remain on the scalp for one or two days, then apply Lassar's paste. When desired, remove the paste and crusts with a two per cent boric acid ointment in vaseline.

(Baginsky.)

5.

Acidi salicylici	2
Zinci oxidi	25
Amyli	25
Petrolati mollisq. s. ad 10	0.

Apply in a thick layer.

(Lassar.)

6.

Zinci oxidi	25
Amyli	5
Petrolati mollisq. s. ad 100).

Apply in a thick layer. An inert powder may be applied over the paste.

(Lassar.)

7.

Sulphuris præcipitati	4
Zinci oxidi	25
Amyli	25
Adipis lanæ hydrosi	25
Petrolati mollis	00

Apply in a thick layer.

(Ihle.)

ECZEMA LABIORUM.
1.
Hydrargyri chloridi corrosivi
2,
Acidi salicylici
3.
Hydrargyri oxidi flavi
(Gaucher.)
4.
Thymolis
ECZEMA NARIUM.
1.
Acidi salicylici
Introduce into nasal cavities on tampons of cotton.
(Besnier.)
2.
Glyceriti plumbi subacetatis
(Hardaway.)
3.
Zinci oxidi
Insert in nasal cavity. Each suppository should contain one
grain of the oxide.

(Neumann.)

ECZEMA PALPEBRARUM.

EOZIMA I HDI DDIVIZIONI.
1.
Acidi borici 5 Glycerini 5 Unguenti q. s. ad 100.
2.
Hydrargyri oxidi flavi
(Kaposi.)
3.
Aristolis
4.
Europheni
ECZEMA UMBILICI.
1.
Thymolis
2. Liquoris plumbi subacetatis
Apply on tampons moistened with the solution.
3. Cocainæ hydrochloratis

ERYSIPELAS.

1.

Quininæ sulphatis	1
Acidi sulphurici, q. s. ad sol.	
Syrupi	50
Aquæ destillatæq. s. ad 10	00.

A teaspoonful every two hours for a nursing child. If preferred, the tincture of iron may be given in doses of from five to ten drops every two hours, and to nursing children two drops every two hours.

2.

Use subcutaneously in doses of from one-tenth of a grain to three-tenths of a grain each. Repeat after two, eight, and ten hours. It may also be given internally at the same time.

(Bau.)

3.

Sodii benzoatis......q. s.

Give from five to ten grains, in divided doses, during twentyfour hours.

(Schiller.)

4.

ANTISTREPTOCOCCIC SERUM TREATMENT.

Give in hypodermatic doses of ten cubic centimetres each. These doses are of a serum prepared by Marmorek which is constant in strength and character.

5.

chthyolis)
Adipis lanæ hydrosiq. s. ad 100	

Employ multiple scarification of the affected area, reaching into the corium and partly into the subcutaneous tissue. The surface is thoroughly washed with an antiseptic solution, and as much of the ædematous fluid as possible is expressed. An incision reaching to the corium is made, completely encircling the affected area. The ointment is now rubbed in and applied plentifully over the surface, which is covered with gauze and

a thick layer of cotton. The treatment is continued for a few days after the temperature has subsided. In most cases anæsthesia is necessary.

(Felsenthal.)

6.

Alcoholis absoluti......q.s

Apply continuously on thoroughly wet compresses or cotton covered with some impermeable material. Change every fifteen or twenty minutes, and apply lanoline when scaling occurs.

(Sarysdorff.)

7.

Apply with a brush. Application should extend beyond the affected area by three-quarters of an inch. If the face is affected, surround the ears, even if not affected, with a band of the application.

8.

Extracti ergotæ	1
Extracti ergotæ fluidi 1	10
Adipis lanæ hydrosi 2	90
Adinis a sad 100	0

Apply locally in cases of facial erysipelas.

(Lees.)

ERYTHEMA.

1.

Zinci oxidi			
Talci			
Magnesiæq. s. ad 100.			
(Baainsku.)			

Acidi salicylici	1
Magnesiæ	50
Amyli	0.

given

3.

3.
Acidi borici 1 Magnesiæ 50 Amyli q. s. ad 100.
4.
Zinci oxidi
5.
Acidi borici
•
ERYTHEMA NODOSUM.
1.
Sodii salicylatis. 10 Amyli. q. s. ad 100.
Apply on wet cloths. Quinine or salicylate of soda may be given internally. (Monti.)
2.
Argenti nitratis
3.
Olei gaultheriæq. s.
Use as an inunction. 4.
Potassii iodidi. 25 Glycerini <i>sive</i>
Adipis lanæ hydrosiq. s. ad 100.

Apply locally. If preferred, lead water (pure or combined with opium) may be applied.

FAVUS.

1.

Acidi carbolici	3
Aquæq. s. ad 100).

The head is washed and shaved, and epilation is performed. Compresses wet with this solution are then applied continuously from morning until evening, but are removed at night. A coil is laid on the compresses, through which water passes at a temperature of from 125° to 130° F. The compresses consist of about sixteen thicknesses of gauze. If any signs of carbolic poisoning arise, change the solution to a one-quarter per cent sublimate solution, or the latter may be used from the first. Treatment is continued during from eight to fourteen days, when boric vaseline is applied. The child can move about in bed, but the coil must cover the entire scalp, and there should be as little space as possible between the tubes of the coil.

(Zinsser.)

2.

Acidi borici			
Alcoholis 50			
Etheris			
(Shoemaker.)			

3.

Thymolis	2
Chloroformi	20
Olei olivæq. s. ad 10	0.

Apply on compresses three times daily. When microscopic examination of the scales shows that there are no more fungi present, paint the surface daily during eight days with a thirty per cent solution of glycerine and the tincture of iodine.

(Gouladze.)

4.

Losophani)
Unguenti aquæ rosæ 20)
Adipis lanæ hydrosi a. s. ad 100	

Apply twice daily.

(Saalfeld.)

5.

Potassii carbonatis	2
Sulphuris sublimati	
Tincturæ iodidi 2	5
Olei picis liquidæ 2	25
Adipis).

Apply once daily. Continue until active desquamation is established, and allay inflammation with a paste of zinc oxide, starch, and salicylic acid.

(Tsitrine.)

FRECKLES AND OTHER PIGMENTATIONS.

1.

Hydrargyri chloridi	corrosivi	1
Aquæ	q. s. ad 100).

Apply on closely fitting cloths. The patient is to remain in the horizontal position and the cloths are to be kept moist for four hours. Pierce the bullæ at their lower edges, so as to cause them to collapse, and apply an inert powder. The crust will fall off within a week, and the newly-formed epidermis will be unpigmented. This method is very painful and should not be used with children under ten years of age in cases of freckles on the face.

(Kaposi.)

2.

Glycerini	2
Naphtolis	
Linimenti saponis mollisq. s. ad 100).

Apply once daily as a wash.

3.

Hydrargyri chloridi corrosivi	1
Tincturæ benzoini	90
Aquæ aurantii florum fortioris	900
Emulsi amygdalæ30	00.

Apply once daily as a wash.

Saponis mollis..... Wash the face daily with the soft soap and water, and then paint it with either a weak salt or acetic acid solution. 5. Glyceriti amyli......q. s. ad 100. Apply every other day. (Hager.) 6. Tincturæ benzoini...... 4 Unguenti aquæ rosæ......q. s. ad 100. Spread on gauze and leave on over night in cases of freckles. 7. Olei rosæq. s. Barii dioxidi......q. s. ad 100. To be used if the skin becomes red and scaly in the course of healing. (Kaposi.) FURUNCLE. 1. Extracti colchici radicis......q. s.

Give in doses of from one-third to one-half of a grain two or three times daily. Locally, the area affected is well washed with spirits of camphor, and Vidal's red plaster is then applied.

(Brocq.)

2.

GALVANO-CAUTERIZATION TREATMENT.

Use a thin platinum wire point about one-quarter of an inch in length and one-twenty fifth of an inch in diameter, at white heat. It is passed into the follicle to the root of the hair. If applied early enough it is abortive in its action. If used later, when a little pus is already present, the application must be prolonged until the pus is entirely dried up by the heated wire. A thermo-cautery may be used, but it is more painful and causes greater destruction of tissue.

(Loewenburg.)

Wash well with alcohol and apply a tampon moistened with this solution. Renew every twenty-four hours until active inflammation has subsided, then substitute a four-fifths per cent ointment of the yellow oxide of mercury. If an incision is necessary, incise to periosteum and reapply tampon. Care should be taken in cases of small children, on account of the amount of carbolic acid employed. To be used for small furuncles in the ear only.

(McCuen Smith.)

Apply to the affected parts. A two per cent solution of carbolic acid may be used first.

(Newberger.)

HYPERIDROSIS.

1.

Give one-thirtieth of a grain every three hours.

2. Pulveris agarici albi......q. s. Give from one to two grains three times daily. 3. Atropinæ sulphatis......q. s. Give in doses of from one-three-hundredth of a grain to oneone-hundred-and fiftieth of a grain twice daily. 4. Apply on lint in the interspaces between the fingers, toes, genital folds, and axille. This powder may also be placed in the stockings. 5. Acidi salicylici..... Amyli.....q. s. ad 100. Apply as in No. 4. (Kaposi.) 6. Acidi tannici.....

Use as a local wash in cases of hyperidrosis of axillæ, geni-

 Naphtolis
 1

 Spiritus odorati
 3

 Alcoholis
 9, s, ad 300.

tals, palms of the hands, or soles of the feet.

Use as a local wash.

Apply locally as a wash.

9.

Balsami Peruviani	1
Acidi formici	5
Chloralis	5
Alcoholis	Ю.

Apply with cotton that can be destroyed subsequently. In cases of slight severity the chloral may be omitted. If a more powerful action is desired, add one per cent of trichloracetic acid. This solution may also be used in the form of a spray in cases of general hyperidrosis.

(Huesner.)

10.

Unguenti p	oicis liquidæ	50
Ungaenti s	ulphurisq. s. ad 10	00.

Wash the parts with jumper or tar soap. Apply on cloths.

(Van Harlingen.)

11.

Emplastri plumbi
Olei olivæq. s. ad 100.
Sub leni igni et addendo pauxill. aqu. font. coque ut f.
ungu. consistent. spissior.
Adde: Olei lavandulæ florum

Apply once daily on cloths. Dry the feet with powder or lint, but do not wash them. Repeat for from ten to fourteen days. Bathe when exfoliation occurs. Use in severe cases only.

(Hebra.)

ICHTHYOSIS.

Acidi salicylici		2
Adipis lanæ hydrosi		
Petrolati mollis	ad 100	0.

9

	2.
	Acidi carbolici
	3. Resorcini
	4. Tincturæ iodidi
	Glycerini
	(Perez.)
	5.
	Acidi tartarici
then o	ly at first every evening, later every two or three days, nce a week, and finally from time to time. When this applied, use the glycerite of starch every evening.
	(Vidal.)

6.

 Naphtolis.
 2

 Petrolati mollis.
 q. s. ad 100.

Rub in sparingly once or twice daily. Naphthol soap may also be used every other day. In young children inunctions of pure soft soap may be used exclusively.

(Kaposi.)

IMPETIGO.

1.

Hydrargyri chloridi corrosivi	1
Aquæq. s. ad 10	00.

Remove the crusts. Stop all hemorrhage with tampons-Rub the affected areas, especially the borders of the pustules, with this solution. Repeat until no new pustules occur. In most cases two to three daily successive applications are sufficient. If no new pustules appear, those already treated heal rapidly under a zinc ointment or a plaster.

(Neebe.)

(110000.)
2. Olei cadini
3. Hydrargyri oxidi flavi
4. Salolis
5. Acidi borici 8 Zinci oxidi 12 Glyceriti amyli q. s. ad 100.
6. Acidi borici 8 Hydrargyri ammoniati 8 Petrolati mollis q. s. ad 100.
7. Acidi salicylici

INTERTRIGO.

1.

Acidi chromici	3
Aquæq. s. ad	100.

Wash and dry the parts carefully. Paint with this solution, and cover it with some bland powder. Repeat every three or four days. Not more than two or three applications are required generally. If there is great irritation of the parts, some weak antiseptic solution should be used first. This treatment prevents recurrence, by tanning the skin.

(Brault.)

2.

Argenti nitratis	 2
Aquæ	 q. s. ad 100.

To be used in very obstinate cases limited to the anus or genitals. A three-quarters per cent solution of bichloride of mercury may be used if preferred. Bichloride or bran baths at a temperature of 80° F. are often effective.

(Henoch.)

3.

Ichthyolis	1
Aquæ q. s. ad 20	0.

Apply locally if the parts are infected. Powder is to be applied over this. The parts should be kept separated with cotton covered with starch.

4.

Resorcini	1
Aquæq. s. ad 10	0.

Apply locally as in No. 3.

Olei olivæ	
iquoris calcisq. s. ad 10	0.

0.	
Bismuthi subnitratis	
Adipis lanæ hydrosiq. s. ad 100.	
7.	
Acidi salicylici 1 Cetacei 10	
Adipis lanæ hydrosi	
(Widerhofer.)	
(n tachager.)	
8.	
Ichthyolis	
Olei olivæ	
Adipis lanæ hydrosi	
(Monti.)	
0	
9.	
Zinci oxidi	
Petrolati mollis q. s. ad 100.	
(Neumann.)	
TIDIO	
LUPUS.	
1.	
Argenti nitratis	
Aquæ destillatæq. s. ad 100.	
Paint the affected areas.	
Tame the anceted areas,	
2.	
Acidi lactici 80	
Aquæq. s. ad 100.	
3.	
Acidi tartarici	
Alcoholis 15 Acidi carbolici 25	
Olei ricini	
Camphoræq. s. ad 100.	
(Gaucher.)	
•	

4.
Iodi 25 Potassii iodidi 25 Glycerini q. s. ad 100.
Paint the surface affected.
5.
Acidi arsenosi
Spread on linen and cut into sizes desired.
(Hebra.)
6.
Hydrargyri chloridi corrosivi
Ætheris, q. s. ad sol.
Petrolati mollis
To be applied over small surfaces only.
(Doutrete pont.)
·
7.
Hydrargyri iodidi rubri
Apply locally. Warm before using.
(Hardy.)
(Haray.)
8.
Acidi pyrogallici
Petrolati mollisq. s. ad 100.
(Schwimmer.)
9.
Resorcini
Petrolati mollisq. s. ad 100.
(Bertarelli.)

	10.
	Creosoti 4 Acidi salicylici 20 Emplastri plumbi q. s. ad 100,
	(Besnier.)
	11.
	Potassii chloridi. 25 Potassii nitratis. 25 Zinci chloridi q. s. ad 100.
Mel	t together in the form of a pencil. Apply locally.
	(Koebner.)
	12.
	Zinci chloridi 50 Aque q. s.

(Canquoin.)

LUPUS ERYTHEMATOSUS.

1.

Iodi	10
Potassii iodidi	20
Aquæq. s. ad 1	100.

Apply with a brush once or twice daily until sufficient irritation is induced.

(Hardy.)

2.

Ichthyolis	15
Petrolati mollis	0.

Apply over night. Wash with warm water in the morning and apply some bland or antiseptic ointment, as oxide of zinc or a ten per cent boric acid ointment in vaseline. If irritation is then extreme, continue with the non-irritating ointment. Otherwise use the ichthyol for some nights.

2

MILIARIA.

1.

Camphoræ	
Bismuthi subnitratis	
Zinci oxidiq. s. ad 100.	
•	
2.	
•	
Calaminæ præparatæ 3	
Zinci oxidi	
Glycerini	
Liquoris calcis 24	

Apply on a piece of muslin dipped in the solution. Bandage it on if necessary. Calomel or saline laxatives may also be given, or diuretics in the form of the nitrate of potash or the sweet spirits of nitre.

Aquæ rosæ fortioris......q. s. ad 100.

(Holt.)

3.

Liquoris plumbi subacetatis	1
Tincturæ opii	4
Aquæq. s. ad 100	0.

Apply locally and follow with the application of a boric acid powder. To be used in cases of lichen strophulous.

(Crocker.)

NÆVUS VASCULOSUS.

1.

VACCINE-LYMPH TREATMENT.

Three to six superficial cross-incisions are made in the tumor, and the vaccine is introduced in the same manner as in the ordinary process of vaccination. This treatment is to be used in the case of a child who has never been vaccinated. It is likely to leave a larger scar than the electrolytic needle, but is often effective in cases of nævi of moderate size. The child is usually vaccinated in some other part of his body at the same time.

2.

Hydrargyri chloridi	$corrosivi \dots. \\$		10
Collodii		q. s. a	ad 100.

Apply with a brush to the area affected. This is recommended highly by various writers for the treatment of nævus flammeus and araneus, as well as nævus tuberosus, if the latter is small.

DISEASES OF THE NAILS.

ECZEMA OF THE NAILS.

FAVUS OF THE NAILS.

1.

Hydrargyri chloridi corrosivi 3 Aquæq.s. ad 300,

Remove or scrape and file away the nail until perforated. Curette the small yellow areas. Apply the solution on small cotton tampons. Keep in position with a bandage.

2.

Naphtolis	5
Petrolati mollisq. s. ad 100	0.

3.

Acidi pyrogallici	5
Adipis lanæ hydrosi a. s. ad 100	0.

4.

Acidi chrysophanici				. 8
Adipis lanæ hydrosi	q	\mathbf{s}	ad	100.

(Gaucher.)

PSORIASIS OF THE NAILS.

Gallanolis	,
Alcoholis	

Bandage in position. The nail will become movable in a few days, when apply an antiseptic dressing twice daily.

(Pellizari.)

PHTHIRIASIS.

PHTHIRIASIS CAPITIS.

1.

Linimenti saponis mollis......q. s.

The hair is to be cut, if possible, and thoroughly washed with the liniment. When the hair cannot be cut, the head is to be thoroughly washed and a one-third per cent sublimate solution in vinegar is then to be applied. Spirits of camphor or warm vinegar may be used in the same way. After twenty-four hours the head is to be washed again with soft soap and thoroughly combed with a fine comb wet in vinegar.

(Gaucher.)

2.

 Acidi carbolici
 2

 Olei olivæ
 q. s. ad 100.

Rub in well and cover the head with a cloth.

(Monti.)

3.

 Balsami Peruviani
 3

 Olei olivæ
 35

 Petrolei
 q. s. ad 100

Rub the scalp thoroughly with this solution. Cover it with flannel over night and wash with soft soap in the morning. Repeat for two or three days. Nits are to be removed by washing the hair with vinegar and combing it with a fine comb.

4

PHTHIRIASIS CORPORIS.

1.

 Acidi carbolici
 1

 Aquæ
 q. s. ad 100.

The patient is to be well bathed; his clothes are to be exposed to a high temperature; and a complete change of clothing is to be made. This alone is often effective. In a chronic case with severe cutaneous lesions, fumigation, sulphur baths, a mild solution of sublimate, or the above-mentioned solution may be used. Jamieson recommends wearing a piece of roll sulphur, about the size of a pigeon's egg, next to the skin. It is to be wrapped up in gauze and worn day and night.

PHTHIRIASIS PUBIS.

1.

Apply locally and wash the parts with warm water. One application is generally sufficient, but it may be necessary to repeat it two or three times.

2.

Apply as in No. 1.

3.

(Kaposi.)

PRURIGO.

					_	•													
Acidi	carbolici.	.	 		 			 								 		1	L
Aquæ	destillat	æ	 		 	,	,			 			. (a.	s.	 ad	1	00	

Inject one small hypodermatic syringeful every day or every other day. Use lanoline externally and warm baths at the same time.

(Monti.)

2.

Calcis 8
Sulphuris sublimati
Coq. c. aq. fervid
Ad reman100.
Cola et filtra

To be well rubbed into the skin,

(Henoch.)

3.

Petrolei	 50
Glycerini	 q. s. ad 100.

For nursing children. Rub in with flannel wet with the solution. In private practice substitute the balsam of Peru for the petroleum and apply with a brush.

(Monti.)

4.

Naphtolis	 	 1
Petrolati mollis		

Apply two or three times daily. Rub dry with cotton after the last daily application. Bathe the patient after ten or twelve applications.

(Baginsky.)

5.

Unguenti diachylon	. 50
Petroleiq. s. ad	100.

Apply on flannel three times daily if itching is severe.

PRURITUS CUTANEUS.

Camphoræ. 2 Zinci oxidi. 50 Amyli. q. s. ad 100.
2.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
3.
Chloralis. 2 Glycerini 15 Alcoholis. 15 Aquæ. q. s. ad 100.
4.
Mentholis 1 Glycerini 20 Alcoholis q. s. ad 200.
(Kaposi.)
5.
Acidi carbolici 1 Zinci oxidi 15 Petrolati mollis q. s. ad 100
6.
Camphoræ
7.
Cocainæ hydrochloratis
(Gaucher,)

FORMULARY.

PSORIASIS.

1.

1.
Olei cadini
2.
Acidi chrysophanici. 5 Petrolati mollis. q. s. ad 100.
3.
Acidi salicylici 3 Olei cadini 5 Petrolati mollis q. s. ad 100
4.
Sulphuris sublimati. 12 Olei cadini 12 Petrolati mollisq. s. ad 100.
5.
Hydrargyri ammoniati
6.
Hydrargyri oxidi rubri
7.
Acidi salicylici. 2 Sulphuris præcipitati 10 Zinci oxidi. 20 Amyli 20 Petrolati mollis. q. s. ad 100.

To be used before the application of chrysarobin, combined with protracted baths.

(Lassar.)

Gallacetophenoni Unguenti			
oply as an ointment.	Non-irritating.	Effective, but	slow

Ap in its action.

(Gall,)

S.

Chrysarobini 2	30
Zinci oxidi 2	
Adipis lanæ hydrosi	30
Petrolati mollisq. s. ad 100	0.

To be used on small areas only.

(Neisser.)

10.

Chrysarobini	8
Liquoris gutta-perchæ	8
Chloroformiq. s. ad 10	0.

To be applied to affected parts twice a week.

(Ashby & Wright.)

PURPURA RHEUMATICA.

Extracti ergotæ.....q. s.

Give one-tenth of a grain in pill form three times a day. It may be given subcutaneously in doses of one and one-half grains every other day, but is very liable to cause abscesses.

2.

Extracti opii 4	
Unguenti aquæ rosæq. s. ad 100.	

Not to be applied over a large area in cases of young children.

Apply on linen and bandage in place. Not to be used in cases of very young children.

RINGWORM.

1.

Formalini	15
Alcoholisq. s. ad 100	0.

Shave the hair around the margin of the patches and rub in the fluid vigorously with a brush for ten minutes every other day. Apply four times. Salter recommends a forty per cent solution.

2.

Acidi borici	3
Tincturæ camphoræ	3
Glycerini	6
Aquæ aurantii florum fortiorisq. s. ad 10	0.

To be used as a hair wash.

(Franke.)

3.

Hydrargyri iodidi rubri	1
Hydrargyri chloridi corrosivi	4
Alcoholis	50
Aquæ destillatæq. s. ad 2	.00

Use once daily in cases of children who cannot bear chrysarobin.

(Quinquand.)

4.

Naphtolis 1
Balsami Peruviani 3
Sulphuris præcipitati
Spiritus lavandulæ 25
Olei cadini
Linimenti saponis mollisq. s. ad 100.

Apply once daily with a brush.

Tincturæ cantharidis. 6 Tincturæ capsici. 6 Olei ricini. 6 Tincturæ nucis vomicæ. 12 Spiritus odorati. q s. ad 100. (Jamieson.)
(ounteson.)
6. Cupri sulphatis
7. ·
Acidi carbolici. 2 Olei cadini. 20 Sulphuris sublimati. 20 Tincturæ iodidi. 20 Petrolati mollis. q. s. ad 100. Use as in No. 6.
(Smith.)
8. Acidi borici
SCABIES.
1.
Styracis

Styracis	25
Balsami Peruviani 2	25
Olei riciniq. s-ad 100	0.

Rub into the affected parts.

(Baginsky.)

~
Creolini 5
Olei olivæq. s. ad 100.
Apply copiously over night.
$(Jacobi_{-})$

	3.
Balsami Peruviani	50
Glycerini	q. s. ad 100.

Bathe the body with soft soap and warm water. Paint on the fluid and leave it on over night. Apply again next morning, omitting the bathing.

(Monti.)

Naphtolis	1
Cretæ præparatæ	12
Saponis mollis	
Adipis	0.

Apply to the affected parts without a preceding bath. Woollen underclothing is to be worn, or the patient should lie between woollen blankets. Powder the skin thoroughly, and do not bathe for one week.

(Kaposi.)

5.

Olei lavandulæ florum
Olei caryophylli
Potassii carbonatis
Sulphuris præcipitati q. s. ad 100.
Adipisq. s. ut f. unguent.
(Hebra)

6.

Sulphuris præcipitati	10
Balsami Peruviani	10
Petrolati mollisq. s. ad 10)0.

Bathe with soap and hot water, and apply the ointment. Repeat for two or three successive nights. The bedding and patient's clothing are to be sterilized by dry or moist heat.

(Holt.)

7. Unguenti aquæ rosæ.....q. s. ad 100. Wash the skin well and rub in at night. Bathe on the following morning. Repeat daily for three or four days. (Widerhofer.) Cretæ præparatæ..... Petrolati mollis......q. s. ad 100. To be used in cases in which styrax or naphthol is contraindicated. (Williamson.) SEBORRHŒA. SEBORRHŒA CAPITIS. Ætheris..... 4 Sodii boratis.... Aquæ......q. s. ad 100. Shake before using. (Hillairet.) Glycerini........ Tincturæ benzoini..... Acidi borici.... Alcoholis......q. s. ad 100. Apply daily or every other day with a brush. (Kaposi.) 3 Sodii bicarbonatis...... 10

Apply after removal of the scales.

Aquæ.....q. s. ad 100.

FORMULARY.

4.

4,
Balsami Peruviani 2 Olei olivæ
Remove the crusts and apply locally.
_
5.
Acidi carbolici
Apply as in No. 4.
(Gaucher.)
0
6.
Resorcini 2 Unguenti aquæ rosæ .q. s. ad 100.
Keep the scalp covered with the ointment.
7.
Sulphuris præcipitati
Adipis lanæ hydrosiq. s. ad 100.
Apply as in No. 6.
(Holt.)
8.
Unguenti hydrargyri oxidi flavi 5
Petrolati mollis
(Ashby & Wright.)
•

SEBORRHŒA SQUAMOSA NEONATORUM.

The body should be vigorously rubbed with oil and methodically wrapped in cloths smeared with a bland ointment. Warm baths are to be given daily and oily substances again applied. An incubator should be used, or the child should be wrapped in down or woollen coverings.

SEBORRHŒA BALANITIS AND POSTHITIS.

1.
Amyli
Apply to the affected parts on pieces of linen or cotton.
2.
Kaolini. 50 Magnesiæ carbonatis. q. s. ad 100.
Apply as in No. 1.
3.
Plumbi acetatis
Apply as in No. 1.
(Kaposi.)

SYPHILIS.

SYPHILIS HÆREDITARIA.

INTERNAL MEDICATION.

1.

Hydrargyri chloridi mitis.....q. s.

Give from one-twelfth to one-sixth of a grain, mixed with a little sugar of milk, in a small spoonful of water, two or three times daily. Stir just before giving. If there is any tendency to diarrhea, one-sixtieth to one-twelfth of a grain of opium may be added. Widerhofer combines from one and one-half to three grains of the saccharated carbonate of iron with the mercury.

2.
Hydrargyri tannatis......q. s

Give in same doses as the calomel, but omit the sugar of milk. Especially useful with children who have a tendency to diarrhœa. Opium may also be added in the same amounts as in No. 1.

(Heubner.)

Hydrargyri iodidi flaviq. s.

Give from one-sixth to one-twelfth of a grain two or three times daily. Potassium iodide or any other iodide must not be given at the same time, as a caustic iodide of mercury may thus be formed in the intestines.

(Fournier.)

4.

Hydrargyri cum creta.....q. s.

Give from one-sixth to one-third of a grain three times a day.

(Hutchinson.)

INUNCTIONS.

1.

Unguenti hydrargyri cum adipe lanæ hydroso sive cum unguento aquæ rosæ parati.....q. s.

Rub in from five to seven grains under light pressure for from ten to twenty minutes. This is best done in the evening. Cover the part rubbed somewhat more warm than the rest of the body, and wash it softly but thoroughly the next morning with soap and warm water. Change the place of inunction each time to a different part of the extremities and trunk. A pause of a few days is made after six inunctions.

(Heubner.)

2.

Unguenti hydrargyri......q. s.

Rub the ointment into the palms of the hands and soles of the feet every morning and evening. Use five grains for each application. Otherwise apply as in No. 1.

(Hutchinson.)

3.

Rub in from five to fifteen grains daily. Otherwise apply as in No. 1.

(Monti.)

Rub in twenty grains daily. Jacobi recommends the wearing of a soft piece of leather over the knee, underneath which the cintment is applied. If preferred it may be applied under a flanuel abdominal band.

Injections.

1.

Inject twice daily seven and one half minims into the muscular tissues of the gluteal region. The syringe is to be directed at right angles to the skin, which should be previously antiseptically prepared. Avoid moistening with the sublimate solution the point of puncture and the opening into the tissues made by the needle.

(Lewin.)

2.

Hydrargyri chloridi corrosivi	1
Sodii chloridi	4
Aquæ destillatæ	0.

In cases of nursing children inject from one-quarter to onehalf of a small hypodermatic syringeful. One syringeful may be used with larger children.

(Monti.)

3.

Inject once or twice daily in doses containing from one-one-hundredth to one-fiftieth of a grain of the sublimate.

(Jacobi.)

BATHS.

1.

Hydrargyri chloridi corrosivi	0.5 (gr. vijss.)
Ammonii chloridi	1.0 (gr. xv.)
Aquæq. s. ad 10	00.0. (\(\frac{7}{2}\) iij.)

Add to one bath. As a rule one bath every other day.

(Widerhofer.)

FORMULARY.

2.

Hydrargyri chloridi corrosivi	1.0 (gr. xv.)
Ammonii chloridi	6.0 (3 iss.)
Aquæq. s. ad 20	00.0.(3 vjss.)

Add to one or two baths of five gallons of water.

(Monti.)

3.

Ammonii chloridi. 2.0 (gr. xxx.) Hydrargyri chloridi corrosivi. 2.0. (gr. xxx.)

Add to bath of from five to seven gallons of water.

(Comby.)

4.

Hydrargyri chloridi corrosivi...... 1.0. (gr. xv.)

Add to one bath.

(Jacobi.)

The baths are given every day or every other day in an ordinary baby's bath tub, containing from five to seven gallons of water at a temperature of 97° F. To each bath is added from one-half a gramme to two grammes (seven and one-half to thirty grains) of corrosive sublimate, either pure or with the addition of some ammonium chloride. The bath should last from ten to fifteen minutes. It is especially indicated in cases of general eruption, although Baginsky uses this method in preference to all others for all cases. Great care is to be exercised during the bath to prevent the child from swallowing any of the contents of the tub.

PLASTERS.

1.

Emplastri hydrargyri......q. s

The plaster should contain from ten to fifteen per cent of mercury. Apply a piece four inches long by two and one-half inches wide on the breast or back. Change weekly. This is the favorite method used by Fronz in Widerhofer's clinic in Vienna, with very good results.

Olei ricini	7
Hydrargyri chloridi mitis vap. parat 2	3
Emplastri plumbi).

Apply a piece five inches long by two and one-half inches wide. Renew weekly.

(Quinquand.)

INDIRECT AND OTHER METHODS OF TREATMENT.

It is doubtful whether the mammary glands excrete the mercury in the breast milk. This method of treating a child through the milk of the mother is too uncertain and indefinite to be of any practical value. Various other baths, injections, and preparations have been from time to time recommended, but those mentioned here may be regarded as among the most trustworthy. Injections of calomel, peptonate of mercury, and oleum cinereum are worthy of mention in addition to the sublimate, which, however, is to be preferred to all others. Fumigations with calomel and cinnabar are now very little used. The value of serotherapy and injections of syphilitic antitoxin has not yet been determined sufficiently enough to recommend their general use.

DURATION OF TREATMENT.

No definite time can be stated. Each case differs. Hutchinson continues the treatment only while the clearly apparent symptoms are present. Hirschberg employs it through the entire first year. Holt treats a cachectic child whose parents are symptoms are present. continues treatment for six weeks only, unless symptoms arise. Rotch recommends that mercury should be given a syphilitic child during the first three or four years of life at intervals of three or four months, even if no symptoms arise. He gives it at the second dentition and at puberty also. Heubner suggests that treatment should be continued for fourteen days after the last apparent symptoms have disappeared, to be repeated a year later, provided no relapse has occurred in the interim. Each relapse must be treated in the same way as the primary disease. In addition to the general treatment, local applications are of the utmost importance. These are the same as for adults. The importance of cleanliness, good air, and hygienic surroundings cannot be overestimated.

FORMULARY.

SYPHILIS HÆREDITARIA TARDA.

1.

Doto sail is did:		
Potassii iodidi	 	

Give children from the age of six upward, with affections of the bones and swelling of the liver and spleen, about fifteen grains daily. At puberty, or when the symptoms are especially severe, from twenty to thirty grains daily may be given.

(Heubner.)

2.

Iodoformi	10
Collodiiq. s. ad 10	00.

Apply locally in cases of periosteal and osteitic gummata and joint affections. Tincture of iodine, iodized glycerine, and iodol may be used in the form of solutions or ointments.

(Kaposi.)

3.

Potassii sive sodii iodidi	75
Extracti belladonnæ foliorum alcoholici	1
Aquæ destillatæ	00.

Give from one to two teaspoonfuls three times daily after meals. The sodium salt is often better borne than the potassium.

4.

Unguenti hydrargyri......q. s.

Inunctions are to be preferred to all other forms of treatment in most forms of the functional nervous disturbances, and particularly in the rapid or extensive destruction of the soft parts or bones. An inunction of twenty grains may be prescribed for children of from eight to twelve years of age, and of thirty-five grains for older children. The ointment is rubbed into both calves, or both thighs, or both arms, or the entire anterior or posterior surface of the trunk. Each cure, therefore, lasts five days and is repeated as often as is necessary. Sometimes improvement stops, when it is necessary to cease the medication for some weeks and begin anew. Iodine and mercury, either in combination or alternately, are indicated in all forms of visceral syphilis.

(Rabl.)

GENERAL TREATMENT.

Everything should be done to strengthen the organism and overcome the cachexia, as in the early hereditary syphilis. Baths in spring water containing iodine salts, as well as the drinking of the water, are often beneficial. Iron also may be given. When the cases do not do well under the treatment outlined here, Fowler's solution in doses of from five to ten drops daily after meals may be given. The Roncegno or Levico waters may also be given in doses of from one to two teaspoonfuls noon and evening in claret with the meals. Rabl gives either of these to children who drink the iodine waters in the morning.

ACQUIRED SYPHILIS IN CHILDREN.

Every prophylactic measure possible should be taken. Nurses and servants should be carefully examined. Drinking out of public cups, etc., should be absolutely forbidden, and above all indiscriminate kissing. The treatment is the same as that of hereditary syphilis.

URTICARIA.

1.

 $Pilocarpinæ\ hydrochloratis\ q.\ s.$

Give in distilled water at bedtime from one-twentieth to one-eighth of a grain to a child one year old, and from one-fifteenth to one-sixth of a grain to a child from two to three years old. Gradually increase the dose.

(Abrahams.)

2.

Atropinæ sulphatis.....q. s.

Give one-two-hundred-and-fiftieth of a grain in the form of a powder in the evening.

 $(Fr\"{a}ntzel.)$

3.

Give one-half of a grain of this powder in the evening.

FORMULARY.

4. Sodii salicylatis.....q. s. Give from five to twenty grains every two hours for three doses. Only to be used in severe cases with older children. (Lassar.) 5. Calcii chloridi......q. s. Give in doses of from fifteen to thirty grains three times daily. Get the patient under the effects of the drug rapidly, and then gradually diminish the dose. (Wright.) 6. Sodii chloridi......q. s. Moisten the affected area with cold water and rub for ten or fifteen seconds with ordinary table salt applied to the moistened end of the finger. With children, if there is much irritation, a little zinc oxide ointment may be afterward applied. (Berliner.) 7. Zinci oxidi...... 50 Amyli......q. s. ad 100. Add from one-half to one per cent of finely powdered camphor to this if the itching is very severe. (Gaucher.) Bismuthi salicylatis...... 10 Amyli.....q. s. ad 100. Magnesiæ.....q. s. ad 100. 10. Acidi hydrochlorici...... 1 Aquæ destillatæq. s. ad 2500. (Brocq.)

Chloralis 1 Glycerini 5 Aquæ q. s. ad 100.
12. Glycerini
13. Glycerini
14. Tincturæ benzoini 3 Mentholis 5 Glycerini 5 Alcoholis q. s. ad 200. (Kaposi.)
15. Ichthyolis
16. Unguenti hydrargyri ammoniati
17. Mentholis
18 Acidi carbolici 1 Bismuthi subnitratis 10 Petrolati mollis q. s. ad 100. (Gaucher.)

FORMULARY.

VERRUCÆ.

1.

1.	
Acidi nitrici q. s.	
Apply alone on a small piece of wood, or immediately follow it by the application of a few drops of pure liquid carbolic acid. The latter method is recommended by Laubenberg.	
2.	
Hydrargyri chloridi corrosivi. 15 Alumini. 15 Plumbi carbonatis. 15 Camphoræ. 15 Acidi acetici diluti 15 Alcoholis. q. s. ad 100.	
Paint the surface. (Plenck.)	
(Fiener.)	
3.	
Glycerini	
4.	
Acidi acetici glacialis	
5.	
Acidi salicylici	
Paint the surface. (Shoemaker.)	

 Acidi salicylici
 12

 Collodii
 q. s. ad 100.

Apply twice a day for three days, after which soak the part in warm water, and use pumice soap if not inflamed. Repeat if necessary.

(Rotch.)

ZOSTER

1.

Spiritus camphoræ......q. s. Give five drops on a lump of sugar three times daily.

(Drinkwater.)

2.

Liquoris potassii arsenitis......q. s.

Give in gradually increasing doses for the neuralgia continuing after the disappearance of the eruption. If the pain is very severe, either morphine, opium, or chloral may be used in older children.

(Kaposi.)

3.

 Salolis
 25

 Ætheris
 q. s. ad 100

Apply with a brush twice daily.

(Bilkstein.)

4.

Opii pulveris	1
Camphoræ	
Zinci oxidi 2	90
Amyli q. s. ad 100	0.

(Robin.)

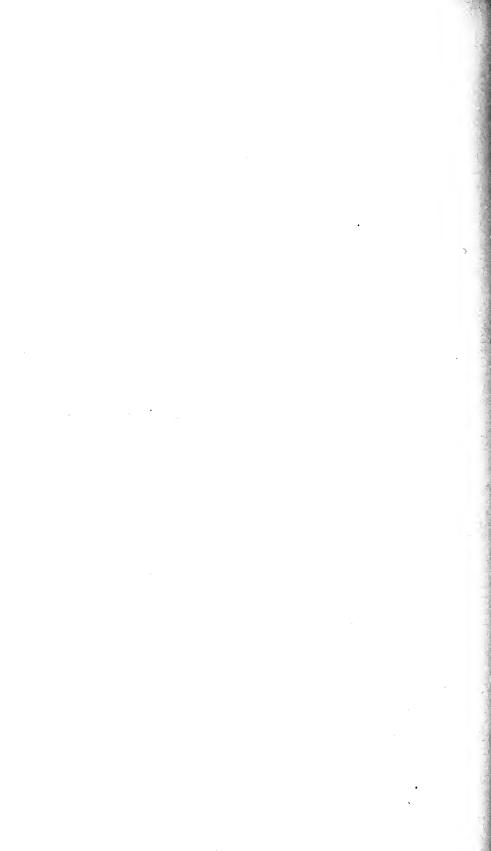
Extracti opii	
Not to be used with very young children.	
6.	
Cocainæ hydrochloratis	
Not to be used over a large area with very young children.	
(Kaposi.)	

7.

Acidi carbolici	1
Mentholis	1
Unguenti zinci oxidi	0
Unguenti hydrargyri ammoniatiq. s. ad 100).

Mix and make stiff by adding zinc oxide. Apply thickly on a jacket of lint.

(Taylor.)



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